



राजपत्र, हिमाचल प्रदेश

हिमाचल प्रदेश राज्य शासन द्वारा प्रकाशित

शनिवार, 02 दिसम्बर, 2017 / 11 मार्गशीर्ष, 1939

हिमाचल प्रदेश सरकार

TRANSPORT DEPARTMENT

NOTIFICATION

Shimla-02, the 21st November 2017

No. TPT-E(3)-57/2017.—The Governor, Himachal Pradesh in exercise of the powers conferred by sub section 14(3) of the Himachal Pradesh Motor Vehicle Taxation Act, 1972 (Act No:4 of 1973) and all other powers enabling him in this behalf is pleased to exempt the vehicle No. HP- 25-A-1815 which is registered in the name of Sh. Raj Kumar S/o Lakhi Ram, VPO and Tehsil Morang, Distt. Kinnour, Himachal Pradesh from the payment of Special Road Tax and Token Tax

leviable under Section-3 of the Himachal Pradesh Motor Vehicle Taxation Act, 1972 with effect from 16-10-2007 to 21-09- 2017 as the vehicle in question is off road during this period.

By order,
SANJAY GUPTA,
Principal Secretary (Transport).

TRANSPORT DEPARTMENT

NOTIFICATION

Shimla-02, the 1st December 2017

No.TPT-C(9)-4/2017-loose.—The Governor, Himachal Pradesh in exercise of the powers conferred by sub section (6) of Section-41 of the Motor Vehicles Act, 1988 (No.59 of 1988) and all other powers enabling him in this behalf is pleased to allot /release registration marks/number from Serial No.0001 to 9999 under the Registration marks **HP-96** to Registering & Licensing Authority Dheera, District Kangra, Himachal Pradesh for registration of motor vehicles with immediate effect.

By order,
SANJAY GUPTA,
Principal Secretary (Transport).

[AUTHORITATIVE ENGLISH TEXT OF THIS DEPARTMENT NOTIFICATION No. TCP-F(5)-6/2017 SHIMLA, DATED 12-9-2017 AS REQUIRED UNDER CLAUSE (3) OF ARTICLE 348 OF THE CONSTITUTION OF INDIA].

TOWN AND COUNTRY PLANNING DEPARTMENT

NOTIFICATION

Shimla-2, 12th September, 2017

No.TCP-F(5)-6/2017.—WHEREAS, the draft Development Plan for Nadaun Planning Area was published by the Director, Town and Country Planning Department, Himachal Pradesh, Shimla under sub-section (1) of section 19 of the Town and Country Planning Act, 1977 (Act No. 12 of 1977) read with rule 11 of the Himachal Pradesh Town and Country Planning Rule 2014 vide Notice No. HIM/TP/PJT/D.P.Nadaun/2004/Vol-II/12-30 dated 01.04.2017 published in the Rajptra, Himachal Pradesh on 20.05.2017 for inviting objection(s) and suggestions(s), which were duly considered and the draft Development Plan was submitted to the Government for approval.

NOW THEREFORE, in exercise of the powers vested under subsection (1) of section 20 of the Himachal Pradesh Town and Country Planning Act, 1977 (Act No.12 of 1977), the Governor, Himachal Pradesh is pleased to approve the Development Plan for Nadaun Planning Area, without any modifications and the same is hereby published in the Official Gazette of Himachal Pradesh as

required under sub-section (4) of section 20 of the Act *ibid*. A Notice is hereby given that a copy of the said Development Plan is available for inspection during office hours in the following offices:—

1. The Director,
Town and Country Planning Department,
Nagar Yojana Bhawan, Block No.32-A, Vikas Nagar,
Kasumpti, Shimla, Himachal Pradesh-171009.
2. The Town and Country Planner,
Divisional Town Planning Office,
Hamirpur, Himachal Pradesh.
3. The Planning Officer
Town Planning Office,
Nadaun, District Hamirpur, Himachal Pradesh.
4. The Secretary,
Nagar Panchayat, Nadaun,
District Hamirpur, Himachal Pradesh.

The said Development Plan shall come into operation from the date of publication of this Notification in the Official Gazette in terms of subsection (5) of section 20 of the Act *ibid* and shall be binding on all Development Authorities constituted under the said Act and all local authorities functioning within the Nadaun Planning Area.

By order,
MANISHA NANDA,
Additional Chief Secretary (TCP).

नगर एवं ग्राम योजना विभाग

अधिसूचना

शिमला-2, 12 नवम्बर, 2017

संख्या. टी0सी0पी0-एफ(5)-6/2017.—नादौन योजना क्षेत्र के लिए विकास योजना के प्रारूप को हिमाचल प्रदेश नगर और ग्राम योजना नियम, 2014 के नियम 11 के साथ पठित हिमाचल प्रदेश नगर और ग्राम योजना अधिनियम, 1977 (1977 का अधिनियम संख्यांक 12) की धारा 19 की उपधारा (1) के अधीन, आक्षेप (पों) और सुझाव (वों) को आमंत्रित करने के लिए निदेशक, नगर एवं ग्राम योजना विभाग, हिमाचल प्रदेश द्वारा नोटिस संख्या हिम/टीसीपी/पीजेटी/डी.पी.नादौन/2004/वोल्यूम-II/12-30 तारीख 01-04-2017 द्वारा राजपत्र, हिमाचल प्रदेश में तारीख 20-05-2017 को प्रकाशित किया गया था जिन पर सम्यक् रूप से विचार किया गया और विकास योजना सरकार के प्रारूप को अनुमोदन के लिए प्रस्तुत किया गया।

अतः हिमाचल प्रदेश के राज्यपाल, हिमाचल प्रदेश नगर और ग्राम योजना अधिनियम, 1977 (1977 का अधिनियम संख्यांक 12) की धारा 20 की उपधारा (1) के अधीन निहित शक्तियों का प्रयोग करते हुए, नादौन योजना क्षेत्र के लिए विकास योजना को बिना किसी उपान्तरण के अनुमोदित करते हैं और इसे पूर्वोक्त अधिनियम की धारा 20 की उपधारा (4) के अधीन यथा अपेक्षित के अनुसार राजपत्र, हिमाचल प्रदेश में एतद्वारा प्रकाशित किया जाता है। एतद्वारा नोटिस दिया जाता है कि उक्त विकास योजना की एक प्रति निरीक्षण हेतु निम्नलिखित कार्यालयों में कार्यालय समय के दौरान उपलब्ध रहेगी, अर्थात्:—

1. निदेशक,
नगर एवं ग्राम योजना विभाग,
नगर योजना भवन, ब्लॉक न० 32—ए
कसुम्पटी, शिमला, हिमाचल प्रदेश—171009.
2. नगर एवं ग्राम योजनाकार,
मण्डलीय नगर योजना कार्यालय,
हमीरपुर, हिमाचल प्रदेश।
3. योजना अधिकारी,
नगर एवं ग्राम योजना कार्यालय,
नादौन, जिला हमीरपुर, हिमाचल प्रदेश।
4. सचिव,
नगर पंचायत नादौन,
जिला हमीरपुर, हिमाचल प्रदेश।

उक्त विकास योजना, पूर्वोक्त अधिनियम की धारा 20 की उपधारा (5) के निबन्धनों के अनुसार इस अधिसूचना के राजपत्र में प्रकाशन की तारीख से प्रवर्तन में आएगी और उक्त अधिनियम के अधीन गठित समस्त विकास प्राधिकरणों तथा नादौन योजना क्षेत्र के भीतर क्रियाशील समस्त प्राधिकरणों के लिए आबद्धकर होगी।

आदेश द्वारा,
मनीषा नन्दा,
अतिरिक्त मुख्य सचिव (टी०सी०पी०)

[AUTHORITATIVE ENGLISH TEXT OF THIS DEPARTMENT NOTIFICATION No. TCP-F(5)-5/2017 SHIMLA, DATED 12-9-2017 AS REQUIRED UNDER CLAUSE (3) OF ARTICLE 348 OF THE CONSTITUTION OF INDIA].

TOWN AND COUNTRY PLANNING DEPARTMENT

NOTIFICATION

Shimla-2, 12th September, 2017

No.TCP-F(5)-5/2016.—WHEREAS, the draft Development Plan for Dharamshala Planning Area was published by the Director, Town and Country Planning Department, Himachal Pradesh, Shimla under sub-section (1) of section 19 of the Town and Country Planning Act, 1977 (Act No. 12 of 1977) read with rule 11 of the Himachal Pradesh Town and Country Planning Rules, 2014 vide Notice No. HIM/TP/PJT/D.P. Dharamshala/2013/Vol-III/103-20 dated 01.04.2017 published in the Rajpatra, Himachal Pradesh on 21.04.2017 for inviting objection(s) and suggestion(s), which were duly considered and the draft Development Plan was submitted to the Government for approval.

Now THEREFORE, in exercise of the powers vested under sub-section (1) of section 20 of the Himachal Pradesh Town and Country Planning Act, 1977 (Act No.12 of 1977), the Governor, Himachal Pradesh is pleased to approve the Development Plan for Dharamshala Planning Area,

without modifications and the same is hereby published in the Official Gazette of Himachal Pradesh as required under sub-section (4) of section 20 of the Act *ibid*. A Notice is hereby given that a copy of the said Development Plan is available for inspection during office hours in the following offices, namely:—

1. The Director,
Town and Country Planning Department,
Nagar Yojana Bhawan, Block No. 32-A, Vikas Nagar,
Kasumpti, Shimla, Himachal Pradesh-171009.
2. The Town and Country Planner,
Divisional Town Planning Office, Dharamshala
District Kangra, Himachal Pradesh.
3. The Commissioner,
Municipal Corporation, Dharamshala,
District Kangra, Himachal Pradesh.

The said Development Plan shall come into operation from the date of publication of this Notification in the Official Gazette of Himachal Pradesh.

By order,
MANISHA NANDA
Addl. Chief Secretary (TCP).

नगर एवं ग्राम योजना विभाग

अधिसूचना

शिमला-2, 12 नवम्बर, 2017

संख्या. टी0सी0पी0-एफ(5)-5/2017.—धर्मशाला योजना क्षेत्र के लिए विकास योजना के प्रारूप को, हिमाचल प्रदेश नगर और ग्राम योजना नियम, 2014 के नियम 11 के साथ पठित हिमाचल प्रदेश नगर और ग्राम योजना अधिनियम, 1977 (1977 का अधिनियम संख्यांक 12) की धारा 19 की उपधारा (1) के अधीन आक्षेप (पों) और सुझाव (वों) को आमंत्रित करने के लिए निदेशक, नगर एवं योजना विभाग, हिमाचल प्रदेश द्वारा, नोटिस संख्या: हिम/टीपी/पीजेटी/डी.पी. धर्मशाला/2013/वोल्यूम-III/103.20 तारीख 01-04-2017 द्वारा, राजपत्र, हिमाचल प्रदेश में तारीख 21 अप्रैल, 2017 को प्रकाशित किया गया था जिस पर सम्यक् रूप से विचार किया गया और विकास योजना के प्रारूप को सरकार को अनुमोदन के लिए प्रस्तुत किया गया।

अतः हिमाचल प्रदेश के राज्यपाल, हिमाचल प्रदेश नगर और ग्राम योजना अधिनियम, 1977 (1977 का अधिनियम संख्यांक 12) की धारा 20 की उपधारा (1) के अधीन निहित शक्तियों का प्रयोग करते हुए, धर्मशाला योजना क्षेत्र के लिए विकास योजना को बिना किसी उपान्तरण के अनुमोदित करते हैं और इसे पूर्वोक्त अधिनियम की धारा 20 की उपधारा (4) के अधीन यथा अपेक्षित के अनुसार राजपत्र, हिमाचल प्रदेश में एतद्वारा प्रकाशित किया जाता है। एतद्वारा नोटिस दिया जाता है कि उक्त विकास योजना की एक प्रति निरीक्षण हेतु निम्नलिखित कार्यालयों में कार्यालय समय के दौरान उपलब्ध रहेगी, अर्थातः—

1. निदेशक,
नगर एवं ग्राम योजना विभाग,
नगर योजना भवन, ब्लॉक न0 32-ए,
कसुम्पटी, शिमला, हिमाचल प्रदेश-171009.
2. नगर ग्राम योजनाकार,
मण्डलीय नगर योजना कार्यालय, धर्मशाला,
जिला कांगड़ा, हिमाचल प्रदेश ।
3. आयुक्त,
नगर निगम, धर्मशाला, जिला कांगड़ा
हिमाचल प्रदेश ।

उक्त विकास योजना इस अधिसूचना के राजपत्र हिमाचल प्रदेश में प्रकाशन की तारीख से प्रवर्तन आएगी।

आदेश द्वारा,
मनीषा नन्दा,
अतिरिक्त मुख्य सचिव (टी0सी0पी0)।

**DEVELOPMENT PLAN
NADAUN PLANNING AREA**

**DISTRICT HAMIRPUR,
HIMACHAL PRADESH**

**Prepared By:
Town and Country Planning Department
Government of Himachal Pradesh**

Mission: Shaping Tomorrow

**Consultant:
Voyants Solutions Pvt. Ltd., Gurugram**

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List of Abbreviations

%	percent
AGISAC	Aryabhatta Geo Informatics and Space Application Centre
BIS	Bureau of Indian Standard
BMO	Block Medical Office
BOD	Biochemical Oxygen Demand
CAGR	Compound Annual Growth Rate
CBSE	Central Board of Secondary Education
CD Block	Community Development Block
CFL	Compact Fluorescent Lamp
CPCB	Central Pollution Control Board
cumes	Cubic meter per second
DHE	Department of Higher Education
DO	Dissolved Oxygen
DPF	Demarcated Protected Forest
DSP	Deputy Superintendent of Police
DTCA	Department of Tourism and Civil Aviation
ft.	feet
GDDP	Gross District Domestic Product
GDP	Gross Domestic Product
GEC-97	Groundwater Resource Estimation Committee - 1997
GIS	Geographic Information System

GoHP	Government of Himachal Pradesh
Gol	Government of India
GP	Gram Panchayat
GSDP	Gross State Domestic Product
ha	Hectare
HFL	High Flood Level
HFW	Health and Family Welfare Department
HGV	Heavy Goods Vehicles
HH	Household
HPIPH	Himachal Pradesh Irrigation and Public Health Department
HPSEB	Himachal Pradesh State Electricity Board
HPSPCB	Himachal Pradesh State Pollution Control Board
HPTCP Act	Himachal Pradesh Town and Country Planning Act
HRTC	Himachal Road Transport Corporation
I.C.A.R	Indian Council of Agricultural Research
IRC	Indian Road Congress
IPH Dept.	Irrigation and Public Health Department
ITI	Industrial Training Institute
km	kilometer
L.U.P.	Land Use Planning
LED	Light Emitting Diode
LMV	Light Motor Vehicle
LOS	Level of Service
lpcd	litres per capita per day
LWSS	Lift Water Supply Scheme
m	metres
MLD	Million Litres per Day
mm	millimeter
msl	mean sea level
MSME	Micro Small and Medium Enterprises
MDR	Major District Road
MoEF	Ministry of Environment and Forest
MoUD	Ministry of Urban Development
MoRTH	Ministry of Road Transport and Highways
MT	Metric Tonne
MW	Mega Watt
NAC	Notified Area Council
NDDP	Net District Domestic Product
NDP	Net Domestic Product
NH	National Highway
NHAI	National Highway Authority of India
NIDM	National Institute of Disaster Management
NP	Nagar Panchayat
NRSC	National Remote Sensing Centre
NSDP	Net State Domestic Product
O-D	Origin - Destination
ODR	Other District Road
PCI	Per Capita Income
PCU	Passenger Car Unit
PM	Particulate Matter
PMGSY	Pradhan Mantri Gram Sadak Yojana
pph	persons per hectare
PPP	Public Private Partnership
PPPP	People Public Private Partnership
ppm	parts per million
PRI	Panchayati Raj Institution
psi	pounds per square inch
PWD	Public Works Department
RFP	Request for Proposal
ROW	Right of Way
RSPM	Respirable Suspended Particulate Matter
SC	Scheduled Caste

SDM	Sub-Divisional Magistrate
SHO	Station House Officer
SPM	Suspended Particulate Matters
sq.km.	square kilometer
ST	Scheduled Tribe
TCPD	Town and Country Planning Department
UGC	University Grant Commission
UGR	Under Ground Reservoir
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
URDPFI	Urban and Regional Development, Planning, Formulation and Implementation
USP	Unique Selling Proposition
UT	Union Territory
UFW	Unaccounted For Water
V/C	Volume/Capacity
WHO	World Health Organisation
WPR	Work Participation Rate

EXECUTIVE SUMMARY

1.0 Project Context

Himachal Pradesh is one of the leading hill States in India with a population of 68,64,602 persons as per 2011 Census. There are 54 Urban Local Bodies and 59 census towns in the State. Apart from these, there are 34 Planning Areas and 35 Special Areas notified under the provisions of the Himachal Pradesh Town and Country Planning Act, 1977.

In the wake of rapid urbanisation and economic growth, the Government of Himachal Pradesh (GoHP) intends to regulate the development process in its urban settlements, to ensure that these urban settlements continue to serve their purpose without causing inconveniences and difficulties to the population, and the administration. To achieve the same, the Department of Town and Country Planning has prepared this Development Plan.

2.0 Planning Area Profile

Nadaun is a historical trade town in Hamirpur district which is famous for its historical Nadaun Fort and Dasvin Patshahi Gurudwara, National level Atal Bihari Vajpayee Cricket Stadium, Laveneshwar Mahadev Temple and Peer Sai Fazal Shah Saheb Grave. Nadaun is situated between Kangra and Hamirpur Towns. It is situated at the foothills of Shiwalik ranges at an elevation ranging from 260 to 400 meters above mean sea level on the left bank of the Beas River. The town is situated in sub-tropical monsoon climatic region with wet summer and cold-wet winter seasons. The major soil type in the region is sandy loam which is good for both cultivation and forestry. Nadaun Planning Area comprises of four revenue villages of Nadaun Nagar Panchayat and eleven Revenue Villages in Gram Panchayats constituting 9,912 population and comprising 897.39 Ha of area. The gross population density of Nadaun Planning Area stands at 11 pph. The gross population density of Nadaun Nagar Panchayat is 19 pph in 2011 which has been in a constant since 2001 attributed due to low growth rate of population in urban area. However, Nadaun Planning Area has a net density of 74 pph.

Nadaun Planning Area is located at cross-junction of two National Highways, NH-3 connecting Nadaun with Atari and Manali via Amritsar-Jalandhar-Hoshiarpur-Hamirpur-Mandi-Kullu and NH-303 connecting Nadaun with Nagrota via Ranital-Jwalamukhi. The nearest airport is located at Gagaal at a distance of 59 km while the nearest railway station is Jwalaji Road (a narrow-gauge

railway station) at about 33 km away from the planning area. The nearest broad-gauge railway station is located at Amb at a distance of 38 km from the planning area.

2.01 Demographic Characteristics

Of the total population of Nadaun Planning Area (i.e., 9,912) 44.69% population (4,430) reside in the Nagar Panchayat Area and 55.31% (5,482) in the rest of the planning areas. The Planning Area has a decadal population growth of 12.68% in the last decade, a sex ratio of 996 females per 1000 males and literacy rate of 91% as per Census 2011. The Planning Area has about 16% population, under category of Scheduled Caste and Scheduled Tribe.

2.02 Economy of the Planning Area

The Work Participation Rate of the planning area is 46% with most of the workers (56.64%) engaged in tertiary sector, 41.64% engaged in primary sector and only 1.72% works engaged in secondary or industrial sector. The workforce constitutes of 59% male and 41% female workers as per Census 2011. The percentage of women participation has increased from 30% in 2001 to 41% in 2011 with 72% women engaged in the primary sector. Maize and wheat are major food crop cultivated during Kharif and Rabi season respectively. Nadaun falls in the vegetable producing belt of the state. The main horticultural crops in the region include oranges, lemons, *amla*, mangoes and *galgal*.

2.03 Transportation and Connectivity

Stretch of about 6.76 km of National Highway falls in the planning area. Out of which, 2.88 km act as the urban road in Nadaun. The NHs are two lane undivided roads with 1.5m shoulders at both ends in the planning area. Out of the total roads maintained by Nagar Panchayat, 90% are concrete road, 7% are bitumen and 3% earthen. The other roads passing through the planning area viz., Major District Road (MDR) and Other District Roads (ODR) are maintained by PWD. Most of the village roads are constructed under Pradhan Mantri Gram Sadak Yojana. Of the total roads under PWD, 93% roads are metalled and rest non-metalled. There is no designated on-street or off-street parking spaces and designated pathways in the planning area.

Walk trips constitute more than 65% of the total household trips. The modal split includes 65% walk trips, 15% public transport (bus) trips, 13% two wheelers trips, 5% cars and 2% cycles/ NMT trips.

As per the traffic survey, the Level of Service for the part of NH-3 connecting Jalari with Hamripur is of Category A and the Level of service for the part of NH-3 connecting Nadaun with Amb and Una is Category B while, the Level of Service for the part of NH-303 connecting Nadaun with Kangra district is of Category C.

A by-pass has been proposed to divert the through traffic from Nadaun town. The by-pass is proposed from the right bank of the River Beas. It enters the Planning Area near Nadaun Fort in Bela village, passes through Tillu Khas and merge with the MDR 36 at Jalari.

2.04 Physical and Social Infrastructure Provision

Both surface water and groundwater are utilised to meet the water demand of the people of Nadaun Planning Area. The estimated water demand for the planning area is 2.89 MLD and the sewage generated is 2.50 MLD. Proper waste management for 16.66 T/day of the Planning Area would be required.

In terms of educational facilities, the area is self-sufficient with all the educational facilities and can also cater to the future population. The level of medical facilities is inadequate in the planning area. Also, there are no fire station and disaster management cell in the area. The planning area has good coverage of telecommunications network, and is well connected with landline as well as mobile telephonic connection. The villages have internet access facilities though the network connectivity is poor. The villages are served by the sub-divisional head post office and sub-post offices. Every village has postal facilities within 2km radius.

There are two main markets in Nadaun Nagar Panchayat area. The old market is located inside the town and the new market is located near to bus stand. There are no recreational open green spaces within the planning area, apart from a National level cricket stadium.

2.05 Forest and Environment

Nadaun Planning Area has a forest cover of 13.48% which includes 12.38% Demarcated Protected Forest and 1.10% Forest under government land. The major species of tree found in the planning area are Khair, Cheel, Shesam, Neem, Kikar, Sirish and Kasmal. The commonly found animals in the district are namely leopard, hare, wild boar, jackal, kakar, monkey and sambhar.

As per the HPSPCB, the level of concentration of toxic substances such as SO₂ and NO₂ is within the acceptable limits but the level of Suspended Particulate Matters (SPM) and Respirable Suspended Particulate Matter (RSPM) present in the air is above the acceptable national standards.

2.06 Disaster Management

Nadaun Planning Area is highly prone to earthquake and related hazards. In terms of earthquake hazard risk profiling, almost entire Hamirpur district (91%) falls in Zone V which is a very high damage risk zone. Drought is another major problem of the region. The sources of drinking water as well as *nalah* dry-up during the months of summer, due to depleted ground water level and insufficient rainfall. In spite of being located in high vulnerability zone in terms disaster intensity, no such preparedness mechanisms are observed at individual and community level.

2.07 Heritage and Tourism

In terms of cultural and historical importance, Nadaun Planning Area is endowed with a number of heritage and architecturally magnificent structures of regional as well as religious importance. The important places of interest in and around Nadaun Planning Area includes the Nadaun Fort, Peer Saheb Grave, Patshahi Dasvin Gurudwara, Dhyanu Bhagat Samadhi, Pattan wali Paudiyan, Kaji Pattan Paudiyan, Matta wali Paudiyan, 105 stepped *Baoli* and Beas River. Most of these heritage structure are in a dilapidated conditions and no restoration processes have been undertaken by the local or district level authorities.

There is a proposal by the State Government for river rafting from Nadaun to Dhera Bridge. It is proposed that the base for the river rafting be developed on the north-western edge of the planning area in Bela village in the vicinity of the Nadaun Fort. It is also proposed the camping sites be developed on the river bed along the edge of Beas River. A Religious-cum-Heritage Tourist Circuit is also proposed which includes Jwalaji-Pattan Bazaar-Shiv Temple-Samadhi of Dhyanu Bhagat-Patshahi Gurudwara-Peer Saheb Grave-Lavneswar Mahadev Temple-105 stepped *Baoli*-Nadaun Fort.

The area has enough tourism potential which has not yet been explored.

2.08 Land Use

Out of the total land in Nadaun Planning Area (897.39 Ha) only 132.60 Ha i.e., 14.78% is developed and remaining 764.79 i.e., 85.22% in under developed. Of the total developed land,

about 64.32% is residential area while 5.18% of the land is under commercial use. Transportation which includes road and other transportation facilities constitutes an area of 21.83 Ha i.e., about 16.47% of the total developed area. The public and semi-public area and open green area in Nadaun Planning Area account for nearly 8.55% and 5.48% of total developed area of Nadaun Planning Area. The total Nadaun Planning Area has about 57.51% land under agriculture, 15.89% land under forest which includes about 12.38% land under Demarcated Protected Forest and 1.10% under forest on government land. River Beas along with this bank cover about 11.76% of the total area under Nadaun Planning Area.

3.0 Development Proposal

Based on the inherent potentials and prospects of the Planning Area. It is envisaged to develop Nadaun as Tourism-cum-Trade Hub with encouragement given to agriculture while acting as a Transit Town. All the supporting facilities and amenities will be developed so that it can cater tourists as well as student population. Tourism, transit zone and *mandi* can emerge as an instrument to drive economic growth and generate revenue, becomes sustainable for Nadaun.

3.01 Projections

Population of Nadaun Planning Area is anticipated to increase to 17501 by the year 2035. As 51 percent of the total population is anticipated to be workforce, there are likely to be 8926 workers, accordingly provision of work areas has been made in the Development Plan.

4.0 Proposals and Recommendations

4.01 Housing

In order to cater for the requirements of housing for the anticipated population of 17501 persons in the Planning Area by the year 2035, at the rate of 4.5 persons per family norm, nearly 3889 families shall be residing in the planning area. Considering the present housing shortage of 311 dwelling units, about 4200 dwelling units shall be required by the horizon period 2035. In view of present trend of low residential density, at the rate of 75 persons per hectare, 104.83 hectares of additional area is required to cater to the additional population of 7589. As 132.60 hectares area is existing, therefore, the total developable area by 2035 would be 237.43 hectares including 2.37 hectares of facilities and amenities.

In Nadaun Planning Area, as the residential development is envisaged to be primarily on the private lands on one hand and acquisition being not preferred by the land owners, the onus of development of residential areas vest with them. The land owners are to ensure either planned sub-divisions of land or land pooling and reconstitution of the plots and accordingly development therein, ensuring provision of convenient shopping, basic service infrastructure including water supply, sewerage drainage, electric supply, road and other requisite facilities and services in view of creation of plots. The owners may construct houses only for their own purpose without exhausting this process. The housing areas are proposed to be developed by integrating future work areas and evolving safeguards for forest areas. The proposed housing sectors/ clusters are proposed to be developed on the neighbourhood principles of self-sufficiency by making provision of requisite infrastructure therein. The concerned local body/Panchayat will be responsible for ensuring the implementation of basic services and infrastructure at local level, by raising the resources through process of undertaking remunerative schemes in the area on land to be got surrendered in its name during the course of Land Pooling and Reconstitution mechanism. In case of bigger land parcels of vacant land the same are to be developed by a development agency which has to play an effective role.

4.02 Trade and Commerce

The existing commercial area comprising of old bazaar (Pattan Bazaar) and the Main Bazaar and will continue to function as such. Commercial activity in the developing new areas shall be allowed

in a planned manner only. Following proposals are being made with regard to trade and commerce:-

1. There is a need of wholesale and warehousing market (Mandi) for both Fruits and Vegetable and Grains for the town. The same is being proposed over an area of 1.29 hectares at Jalari at the cross junction of NH-3 and MDR 36.
2. While the main bazaar shall continue to act as the Town Centre of Nadaun town. There shall be sector-level or cluster level shopping in various sectors of the town. Such shopping centres shall help ease off pressure on main bazaar. The following norms are suggested for planning the above-mentioned shopping centres: —
 - a) Sector-level shopping centre-45 to 50 shops for a population of 5000 persons.
 - b) Convenient shopping centre-10 to 15 shops for a population of 1000 persons.
3. In order to cater to the envisaged tourist population visiting Nadaun hotel and related activity is proposed along NH-3.

Nadaun is a traditionally a trade and historic town. In view of increase in trading activities and boost of tourism in the region, it is proposed to develop a commercial hub at in Tillu Pratham village along the NH-3 and about 10 hotels shall be required to cater to the tourist population by the year 2035. The land required for plot @ 350-400 sq.m. area per hotel which includes parking and circulation area works out to 1.67 hectares. Beside this, an area of 1.84 hectares is required for Retail Shopping Centre at Jalari, Kuthar and Tillu Khas villages. Thus, total requirement works out to 8.70 hectares. As existing area under commercial use is 6.88 hectares, therefore, total additional requirement works out to 1.82 hectares.

4.03 Mixed Use

Mixed land use zone has been proposed at strategic location along the NH-3 and NH-303. It accounts of an area of 2.41 hectares within the planning area.

4.04 Industry

There are no industrial unit operating in the town presently. In order to cater for the requirements of anticipated secondary work force of 893 workers, @ 115 sq.m. area per worker, an area of 10.27 hectares is required for Industry by the year 2035.

It is proposed to develop an industrial estate in Tillu Khas village along the proposed 24m wide by-pass on about 10.27 Ha of available government land. Non-polluting and non-hazardous small-scale or cottage industrial units are proposed in the industrial area viz., Handicraft industries, and agro processing industries.

4.05 Transportation

An area of 21.83 hectares is under the existing transportation network. Town level, inter-sectoral, sectoral and cluster roads are required to be developed in the Planning Area.

With increase in traffic it is envisaged that present NH-3 and NH-303 will not be able to accommodate traffic hence, it is proposed to increase the width of the present NH-3 and NH-303 from present 10 m ROW to 15 m ROW.

As most of the traffic entering Nadaun is E to E i.e., External to External, two by-passes have been proposed one parallel to NH-3 and NH-303 traversing from the right bank of Beas river and entering Bela near Nadaun Fort and then entering Tillu Khas village before meeting NH-3 at Jalari and the other connecting old NH-70 (new NH-3) and old NH-88 (new NH-3) via Bharmoti Kalan at

Jalari. The NH-303 and NH-3 by-passes have been proposed with an ROW of 24 m and the other by-pass of 15 m ROW.

Three junction improvements have been suggested one at present junction of NH-3 and NH-303 near the Bus stand, another at the junction of NH-3 and proposed By-pass in Bharmoti Kalan and at the junction of NH-3 with the two proposed by-passes at Jalari.

A truck terminal is proposed at the cross junction of the proposed by-pass and MDR-36 in Jalari Saunkhlan. The truck terminal proposed on Government land measuring an area of about 0.62 hectares. The truck terminal has been strategically located in close vicinity of the proposed Wholesale and Warehousing Centre (Mandi) located on the other side of the NH-3 in Jalari village as the two activities are correlated and dependent on each other.

The present bus terminal is in the heart of the town in the main market. As per the traffic projections it is envisaged that the present bus terminal will not be able to accommodate the future traffic volume of vehicles/people. Hence, a new bus terminal is proposed along NH-3 in an area of about 0.56 hectares in Nagarada village.

A part from these, new roads of 6m and 9m and widening of important roads have also been proposed in the planning area

To cater to the town level parking requirement, parking lots and taxi stand have been proposed at various locations amounting to an area of 1.0 ha. Local level parking requirements of each land use zone have to be met locally.

4.06 Tourism

The development of tourism in and around Nadaun call for systematic and planned development, check on encroachments, cleanliness of town, integration and systematic and planned marketing of tourist destinations in surrounding areas, like Nadaun Fort and other heritage sites within the planning area and provision of basic amenities at genuine rate.

In order to boost the tourism activity in the Planning Area it is proposed to repair and restore the Nadaun fort, develop the adjoining area in to a tourist spot with landscaped gardens, pathways and sitting arrangements. It is further proposed to conduct light and sound show to present the rich history of the Nadaun Fort. It is also proposed to develop other heritage sites within the planning area as tourist sites.

4.07 Public and Semi Public

An area of 11.33 hectares is existing under utilities, facilities and services. It is anticipated that an area of 2.35 hectares will be required more for providing various facilities at Regional to Cluster level in the Planning Area by the year 2035 as per the requirements.

4.08 Parks and Open Spaces Use

The town lacks in organised parks and open spaces. Local Parks are therefore, required to be developed at cluster/sector level. At the rate of standard of 1.00 hectares per 1000 population, 17.50 hectares land is required to cater for population of the Planning Area by the year 2035. As 7.27 hectares area is existing, therefore, 18.92 hectares area is required more. It is proposed to develop the old Nadaun Fort area into a tourist spot-cum-recreational area with landscaped gardens with fountains, and conducting light and sound show within it. About 10 hectare land has also been earmarked for proposed Botanical and Zoological Park in Tillu Khas village.

4.09 Forest Areas

Nearly about 111.06 hectares of land falls under Demarcated Protected Forest use in Nadaun Planning Area. This has been indicated in the existing land-use map as well as the proposed land-use map. It is proposed to maintain and preserve all these forest areas. However, due to widening of Tillu Khas road, the area under DPF has reduced to 109.38 hectares.

4.10 Water Bodies Use

The land under Water Bodies i.e. 105.51 hectares shall remain without change in land use.

1

The Context

1.1 Background

Himachal Pradesh is one of the highly developed States of India with a population of 68,64,602 persons as per 2011 Census. There are 54¹ Urban Local Bodies and 56 census towns² in the State. Also, there are 34 Planning Areas and 35 Special Areas³ notified under the provisions of the Himachal Pradesh Town and Country Planning Act, 1977.

In the wake of rapid urbanization and economic growth, the Government of Himachal Pradesh intends to regulate the development process in its urban settlements, to ensure that these urban settlements continue to serve their purpose without causing inconveniences and difficulties to the population, and the administration. To achieve the same, the Town and Country Planning Department, Himachal Pradesh, has prepared this Development Plan for the horizon year 2035.

1.2 The Context

Nadaun is a geographically as well as administratively an important town in Hamirpur District. It is the headquarters of Nadaun Sub-Division, Nadaun Tehsil and Nadaun Block. Besides this, Nadaun has become an important regional trade and educational centre, increasing trade and commercial activities with potential for allied agro/forest based industries in the vicinity have strong bearing on its future growth. On opening of Atal Bihari Vajpayee Cricket Stadium, a national level cricket stadium, growth potentials of town have further enhanced.

In order to ensure planned and regulated physical development of such a strategically important town, the Himachal Pradesh Town and Country Planning Act, 1977 was extended to Nadaun Planning Area in the year 2014 vide Gazette notification no. F (5)-7/2013 dated 15-1-2014, covering an area of 1269.59 hectares spreading over 25 revenue villages. Later the planning area was reduced and 10 complete revenue villages and one partly was excluded from the planning area vid Gazette Notification No. F (5)-7/2013 dated 14-5-2015. The revised planning area includes the Nagar Panchayat Area and 10 complete surrounding revenue villages and one partly.

For a planned and regulated development of the Nadaun Planning Area, a comprehensive Development Plan was inevitable. Thus, this Development Plan has been prepared after making exhaustive exercises like collection of primary and secondary data, field surveys, household, land use and traffic survey and after examining the quantitative and qualitative aspects of various land uses, development activities, problems and prospects of Nadaun Planning Area. The Development Plan also includes existing situation analysis, demand-gap assessment, projection and forecasting, future demand estimation, proposals and recommendations, policy framework and implementation strategy.

¹ Source: Urban Development Department - Himachal Pradesh, <http://ud-hp.in/ulblast.html>

² Source: Census of India – 2011, http://censusindia.gov.in/towns/HP_towns.pdf

³ Source: Department of Town and Country Planning, Himachal Pradesh

In order to prepare a technically viable document, acceptable to the masses, stakeholders meeting along with face to face interactions with various government and semi-government officials, members of Nagar Panchayat committee, public representatives Non-Govt. Organizations (NGO's) and general public have been organized.

The Development Plan of Nadaun Planning Area contemplates increase of population from 9,912 in 2011 to 17,642 by the year 2035.

1.3 Objective

The foremost objective of the Development Plan for Nadaun is to guide the present and future growth towards a planned and sustainable development.

The four key goals of the Development Plan are:

- i. Achieve economic growth.
- ii. Provide safe liveable neighbourhoods.
- iii. Provide efficient and sustainable physical and social infrastructure system.
- iv. Conserve the environment both natural and manmade.

Planning Area Profile

2.1 Introduction

Nadaun is a small town in Himachal Pradesh located on north-west corner of Hamirpur District. It is the Headquarters for both Nadaun Tehsil as well as Nadaun Sub-Division. Geographically, Nadaun is situated on the foothills of the Shiwalik range on the left bank of River Beas (Refer Figure 0-1). Besides its beautiful setting, the town has fascinating and variable scenery throughout the year.

2.1 Location

Nadaun is located at 31.78°N 76.35°E. It has an average elevation of 508 metres (1666 feet) from Mean Sea Level. It is situated at a distance of 28 km from Hamirpur and 12 km from Jwalamukhi on the cross-junction of NH-3 connecting Nadaun with Atari and Manali via Amritsar-Jalandhar-Hoshiarpur-Hamirpur-Mandi-Kullu and NH-303 connecting Nadaun with Nagrota via Ranital-Jwalamukhi.

The town is spread over an area of 2.31 sq.km having a population of 4,430 as per Census of India, 2011 and the Planning Area covers 8.97 sq. km. having a population of 9,912 as per Gazette Notification No. TCP-F (5)-7/2015 dated 14.05.2015.

It is well connected by roads with the major towns of the District and the State as well as the neighbouring States. The closest airport is Gaggal Airport situated at 59 km distance from the town center and the nearest rail head is at Jwalamukhi Road at 33 km.

2.2 Planning Area

Nadaun Planning Area was first notified vide Gazette Notification No. TCP-F (5)-7/2013 dated 15.01.2014 wherein 25 revenue villages (*mohals*) including Nadaun Nagar Panchayat area was notified. Later, ten revenue villages (*mohals*) were completely excluded from the Planning Area

and one partly as these *mohals* were situated outside the influence zone of Nadaun Town. The Planning Area was re-notified vide Gazette Notification No. TCP-F (5)-7/2015 dated 14.05.2015.

Nadaun Planning Area comprises a total of 15 *mohals* of which four *mohals* lie within the Nadaun Nagar Panchayat Area and remaining eleven *mohals* within the Gram Panchayat Area. The Nagar Panchayat Area constitutes four *mohals* viz., Kot, Seri, Dolee Gharan and Nagarada. (Refer Figure 0-2).

The Planning Area has an area of about 897.39 Ha or 8.97 sq.km with a population of 9,912.

2.3 Extent of Planning

The planning area is bound by River Beas on the northern and north-eastern side and by Man Khad on the western side. Nadaun town is located at the tri-junction of two of NH i.e., NH-3 (Atari-Manali) and NH-303 (Nadaun- Nagrota).

North: Starting from the confluence point of Beas River and Man Khad along upstream of River Beas following the northern boundary of *Mohal* Kot, Seri and Bela, up to the northern-eastern boundary meeting point of Bela.

East: Starting from the meeting point of northern-eastern boundary of *Mohal* Bela towards southern side following the eastern boundary of *Mohal* Bela, Tillu Khas, DPF Tillu, Jalari Saunkhlan, up to the meeting point of eastern-southern boundary of *Mohal* Jalari Saunkhlan.

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Figure 0-1: Location of the Planning Area

Source: Composed based on TCPD Gazette Notification TCP-F (5)-7/2015 dated 14.05.17

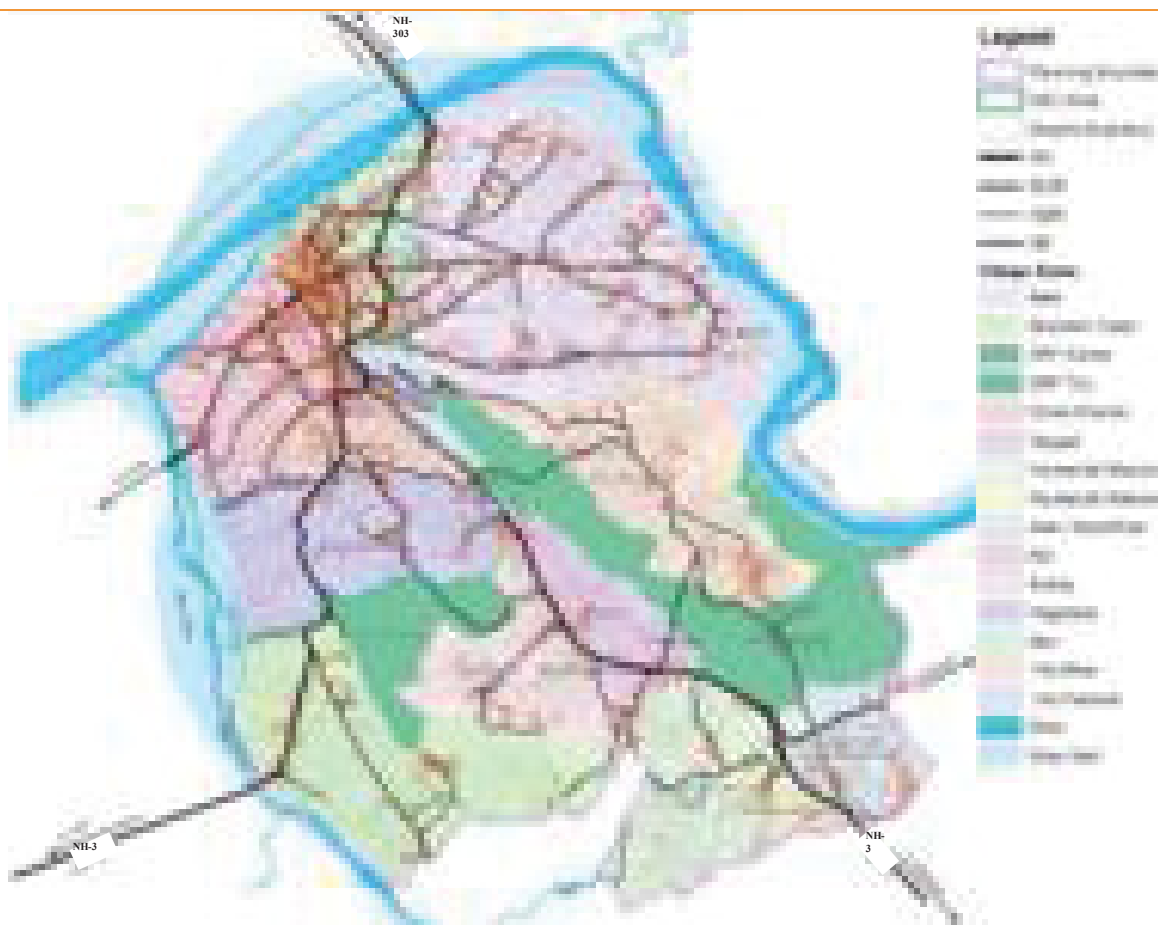


Figure 0-2: Nadaun Planning Area, Hamirpur

Source: *Composed based on TCPD Gazette Notification TCP-F (5)-7/2015 dated 14.05.2015*

South: Starting from the meeting point of eastern-southern boundary of *Mohal Jalari Saunkhlan* towards western side following the southern boundary of *Mohal Jalari Saunkhlan*, up to NH-3 (Atari-Manali) then following the Nallah boundary downstream passing between *Mohal Harmandir Rukwalan*, then following the southern boundary of *Mohal Harmandir Mandiala*, *Mohal Bharmoti Kalan*, up to the meeting point of southern-western boundary of *Mohal Bharmoti Kalan*.

West: Starting from the meeting point of south western boundary of *Mohal Bharmoti Kalan* towards northern side following the western boundary of *Mohal Bharmoti Kalan*, Nagarada and Kot, up to the confluence point of Man Khad and Beas River.

The composition of Nadaun Planning Area is presented in Table 0-1.

Table 0-1: Notified Planning Area of Nadaun

Sl. No.	Name of Revenue Village		Area (in Ha.)	Population
1	Seri	Naga r Panc haya †	61.48	4430
2	Kot		74.00	
3	Nagarada		72.84	

Source: TCDP Gazette Notification TCP-F (5)-7/2015 dated 14.05.2015

Source: Block Development Office, Nadaun

2.5 Regional Setting and Linkages

The planning area is well connected by air, rail and roadways with all the major towns and cities of Himachal Pradesh and India. The district head-quarter Hamirpur is just 28km away from Nadaun. Shimla, the state capital is located at a distance of 170km from Nadaun Planning area. The two important cities of regional importance and opportunities namely, Chandigarh and Delhi are located at distances of 177 km and 406 km respectively.

Considering the strategic location of Nadaun town, it has the potential to be developed as a Transit node in between Kangra and Hamirpur on one side and Kangra and Una on the other side.

2.5.1 By Air

Gaggal Airport in Kangra District is the nearest airport to Nadaun. It is located 59 km north of Nadaun. Daily three flights ply between Delhi and Gaggal.

2.5.2 By Rail

The nearest railhead of Nadaun town is Jwalamukhi Road which is located 33 km north of the town. It is a Narrow-Gauge Railway line which connects Pathankot with Kangra and Jogindernagar. There is another Broad-Gauge railhead located at Amb, at a distance of 38 km south west of Nadaun town. It is directly connected with Chandigarh and Delhi via Una.

Figure 4-4: Regional Connectivity of Nadaun

Source: Google Maps

2.5.3 By Road

Nadaun is located along the NH-3 and NH-303. The town is accessible from Hamirpur (28 km south east of the town) and Una (72 km south west of the town) by NH-3 which connects Atari-Amritsar-Jalandhar-Hoshiarpur-Nadaun-Hamirpur-Toni Devi-Awa Devi-Mandi- Kullu- Manali⁴. Sujanpur is accessible via MDR 36. The Hamirpur road (NH-3) connects Nadaun with Shimla (the state capital) and Amb road (NH-3) connects Nadaun town Chandigarh and Delhi (National Capital).

2.6 Historical Setting

2.6.1 Pre-Independence

During the Medieval times, Nadaun was a part of the Princely State of Kangra. It was the headquarters of the Nadaun *Jagir* in the Princely State of Kangra. Maharaja Sansar Chand II⁵ of Kangra held his court during summer for a number of year during his reign⁶.

Raja Jodhbir Chand, son of Raja Sansar Chand II, was the first king of Nadaun. He was granted the *jagir* of Nadaun in 1823.⁷ Nadaun soon emerged as a centre of arts and commerce.

Nadaun was a cheerful place, during the reign of Sansar Chand II. There was a saying in Kangra hill that "*Aaye Nadaun Jaaye Kaun*" (who comes to Nadaun would never want to go back).⁸ Bulleh Shah, a famous sufi poet, in his famous poem "*Bulla Ki Janna mein Kaun*", also mentions Nadaun as "*Na mein rehnda vich Nadaun*" (nor do I live in Nadaun).⁴ Ghulam Mohiuddin also, writes in Tarikh-i-Punjab that it is peaceful town with a good Rest House, an Old Palace and Shiva temple.⁵

However, the history of Nadaun dates back to the seventeen century, when the famous Battle of Nadaun was fought. The Battle of Nadaun was fought on the banks of Beas River, between Raja Bhim Chand of Kahlur (Bilaspur) and the Mughals under Alif Khan in the year 1691. The Mughal emperor, Aurangzeb's expeditions in Deccan in the 1690s, had put considerable strain on the Mughal exchequer. As a result, Aurangzeb issued orders to the Governor of Punjab, Azim Khan, to recover annual tributes from the rulers of hill states, who had been defaulting on the payment for three consecutive years.

Azim Khan assigned the duty of collecting tributes to Mian Khan, the viceroy of Jammu. The duty of collecting tributes from Kangra and adjoining principalities was assigned to Alif Khan.⁹ The Raja of Kangra and Raja Dayal of Bijarwal agreed to the demands of Alif Khan. However, Raja Bhim Chand of Kahlur (Bilaspur) refused to oblige and formed an alliance with other chieftains opposed to the Mughals.

As per the tenth Granth of Guru Granth Sahib (holy book of Sikhs), Guru Gobind Singh (the tenth Sikh Guru) fought his second battle in Nadaun on 4th April 1691 and is described as 'Nadaun Jang'. The first battle was fought between Guru Gobind Singh and King of Bilaspur near Bhagani Paonta Saheb. The second battle was fought by Guru Gobind Singh with Mughals on the invitation of Raja Bhim Chand of Kahlur (Bilaspur). Guru Gobind Singh came to fight the battle along with a group of 500 Sikhs with Mughals lead by Alif Khan.¹⁰

⁴Source: MoRTH Gazette Notification S.O. 689(E) dated 04.04.2011

⁵<http://www.royalfamilyofindia.com/kangra/>

⁶History of the Punjab Hill States, J. Hutchinson and J. Ph. Vogel, 1933

⁷<http://www.indianrajputs.com/view/nadaun>

⁸http://himachal.gov.in/index1.php?lang=1&dpt_id=201&level=1&lid=8904&sublinkid=8607

⁹History of the Punjab Hill States, J. Hutchinson and J. Ph. Vogel, 1933

¹⁰<http://himachal.gov.in>

Mughals and his aides were defeated at a battle in Nadaun. After the battle ended, Guru Gobind Singh stayed in Nadaun for eight days, before returning to Anandpur. Later, Maharaja Ranjit Singh built a Gurudwara on the spot where the Guru had pitched his tent.⁷ The Gurudwara was built to commemorate Guru Gobind Singh's victory in the Battle of Nadaun. The Gurudwara known as Gurudwara Dasvin Patshahi or Gurudwara Nadaun Sahib,¹¹ is a prominent place of worship.

2.6.2 Post-Independence

Post-Independence, Nadaun was a part of Kangra District. As a result of trifurcation of Kangra District as Kangra, Hamirpur and Una on September 1, 1972, Nadaun became a part of Hamirpur District of the new State of Himachal Pradesh.

2.7 Evolution of Town

Nadaun town started to evolve in the vicinity of the Patshahi Gurudwara on the North West. When Nadaun came under the jagir of Raja Jodhbir Chand, his palace was built on the north east near the bank of the River Beas. A small settlement in Amtar began to evolve in close vicinity of the king's palace. However, the main city continued to grow on the north-western side primarily due to its nearness with Kangra, the then State Capital and its location on the trade route.

Over the years, the Nadaun town is divided into the Old Town and the New Market Area. The Old Town comprises of Old-Market Area (also called Pattan Bazaar) and Old-Bus Stand Area (also called Jesri). The New Market Area comprises the New Bus-Stand and the Main-Market Area.

The old-market area used to be main center of shopping when the market shifted to what is currently the main-market area. The main-market area is further divided into two parts- the upper bazaar which is close to the Bus-stand and the main-bazaar. Main-Bazaar is in the heart of Nadaun town and is the center of business in Nadaun. Pattan area has got a big play-ground which hosts various cultural events like Ramlila and sometimes used for political and election rallies.

Nadaun is known for Lavneshwar Mahadev temple which is said to be have been founded by the *Pandavas*. It is the birth place of famous freedom fighter Inderpal. A statue of the famous freedom fighter has also been erected at the junction of the New Bus Stand and the junction is named after him. The Patshahi Gurudwara was affiliated to Shiromani Gurudwara Prabandhak Committee in 1935.

The town is also famous for the Atal Bihari Vajpayee Cricket Stadium where National level cricket matches are organised. It is located at the North-eastern edge of Nadaun Planning Area in Bela Gram Panchayat.

2.8 Geographical Setting

2.8.1 Physiography

Even though Nadaun is located in the foot hills i.e., Shiwalik Range of Himalayas, it is mostly plain and has a flat terrain. The planning area has two protected forest located on the two ridges in the centre of the planning area on either side of the NH-3. Beas River flows towards the north side of the planning area and Man Khad flows on the western side of the planning area. The natural drainage consists of inlets and rivulets which has not been developed inside the planning area.¹²

¹¹ *Sikhwiki.com and Documents from Gurudwara*

¹² *Ground Water Information Booklet, Hamirpur District, Himachal Pradesh, District Disaster Management Report, Hamirpur*

2.8.1.1 Elevation

The surface elevation of Nadaun Planning Area ranges from 260 m along the Beas river valley and Man Khad to 400 m at the peak of DPF Tillu. The elevation of the planning area rises from the Man Khad on the western side to the hill top on the south-eastern edge of the planning area. Refer Figure 0-6.

The terrain of the Planning area is mostly plain (57%), rolling or undulating (29%) and hilly (14%).

Table 0-2: Terrain Analysis

Type of Terrain	Area (in Ha)	Percentage
Plain°	515.70	57.47
Rolling or Undulating°	260.57	29.04
Hilly	121.12	33.57
TOTAL	897.39	100.00

Source: Estimation from the base map

2.8.1.2 Slope

The slope of the Planning Area is from south eastern side to north western, western and southern side. As per the slope analysis, almost 87% of the total area in the Planning Area has a gentle slope i.e. $<15^\circ$. It is suitable for any development works. Almost 11% area falls under semi-steep slope category that ranges from 15° to 30° . Approx. 2% area falls under steep slope category that ranges from 30° - 45° . A very small area of 2.26 Ha (0.25%) fall under highly steep slope i.e. $>45^\circ$ where development of any sort is not possible.¹³ Refer Figure 0-7 and Table 0-3.

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Figure 0-5: Historical Evolution of Nadaun Town

Source: Analysis based on History of the Punjab Hill States, J. Hutchinson and J. Ph. Vogel, 1933 and Field investigation

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¹³ URDPFI Guidelines and http://www.sappi.com/regions/sa/SappiSouthernAfrica/Sappi%20Forests/Tree%20Farming%20Guidelines/Part%203_Forest%20Engineering_Chapter%207_Terrain%20Classification.pdf

Areas with more than 15° slope are covered with the forest. These areas are mainly eco-sensitive zones which should be demarcated as the protected or no-development zone. Refer Annexure 2 for Khasra falling in Steep Slopes.

Table 0-3: Slope Analysis

Range of Slope	Area (in Ha)	Percentage
Less than 15°	784.06	87.37
15° - 30°	93.87	10.46
30° - 45°	17.20	1.92
Above 45°	2.26	0.25
TOTAL	897.39	100.00

Source: Analysis based on Base Map prepared by AGiSAC

2.9 Climate

The planning area falls in the humid sub-tropical zone and experiences four broad seasons. The winter season from December to February, summers from March to June, hot and rainy season from July to September and autumn season in the months of October and November. The region receives the 1340.72 mm of rains during the monsoon period. The maximum rainfall i.e. almost 82% occurs during July to August and minimum in the months of April and October. In all, there are 124 rainy days in a year in Nadaun. The hottest month is May and coldest month is January. Maximum and minimum temperatures recorded in the area ranges from 2° to 40 °C.

2.10 Flora and Fauna

The main species of trees available in the area are Khair, Cheel, Sheesam, Neem, Kikar, Sirish Kasmal, Kachnar, Amaltash, Bhera, Kango, Aakhe, Anjeer, Ber, Mango, Jamun, Amla etc.

The species of animals commonly found in the district are namely leopard, hare, wild boar, jackal, kakar, monkey and sambhar. Among the birds commonly found are namely chkor, crow, jungle murga, kala titar, safed titar and woodpecker etc.¹⁴

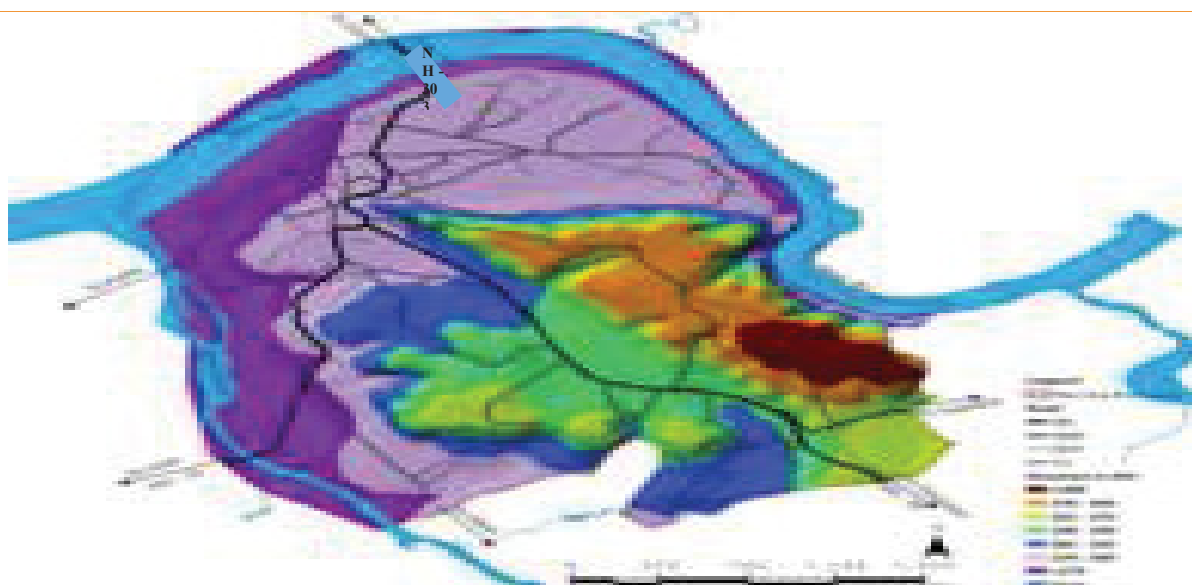


Figure 0-6: Elevation Analysis - Nadaun Planning Area

Source: Analysis based on Base Map prepared by AGiSAC

¹⁴ Forest Range Office, Nadaun and District Disaster Management Report, Hamirpur

2.11 Geology and Soil Character

Nadaun belongs to the Middle Shiwalik Sub group. The Middle Shiwalik Sub-group comprises of large thickness of coarse micaceous sandstone along with some interbeds of early clay. It normally succeeds the Lower Siwalik along a gradational contact. The sandstone is less sorted than those in Lower Siwalik. Clay bands are dull coloured and silty. The general thickness is 1400 to 2000 metres.

In the low-lying areas, along river beds newer alluvium of recent again is seen. The new alluvium deposit comprises alluvium fans and terraces of unsorted sand, silt and clay and rock fragment and boulder beds.¹⁵

The soil in general is brown and varies in texture from loamy sand to clay loam. This type of sandy loam soil with coarse texture which enhances the nutrients and fluid movements that is very good for plant growth and agriculture.¹⁶

At present, few items viz. building stone, sand, stone grit, etc. are being mined in the name of mineral resources. In addition to it glass and silica sand pebbles are also found in the area of Kunah, and Man khads but as yet no commercial exploitation of these minerals have been made.¹⁷

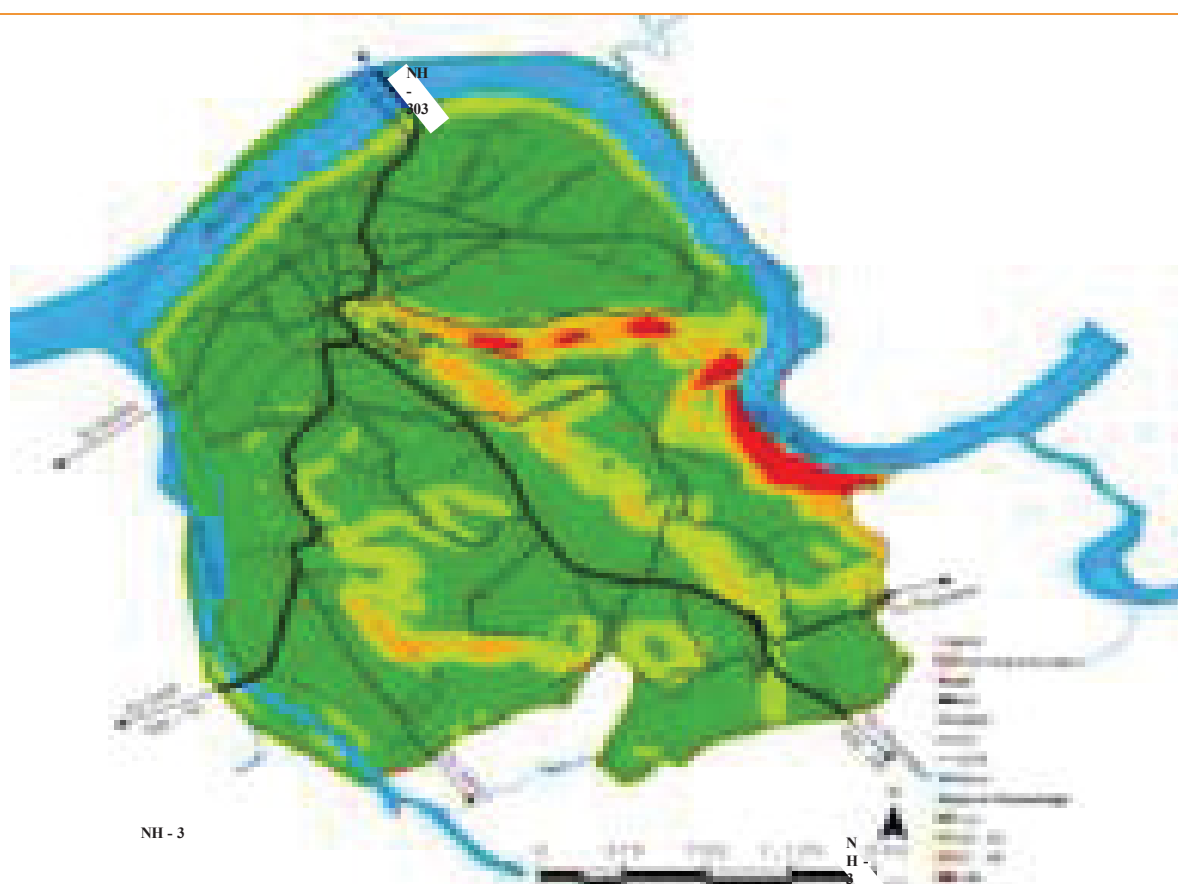


Figure 0-7: Slope in the Planning Area

Source: Analysis based on Base Map prepared by AGiSAC

¹⁵ Study on the Drainage System, mineral potential and feasibility of mining in river/ stream beds of District Hamirpur, Mining Dept., Geological Wing, Hamirpur

¹⁶ District Disaster Management Report, Hamirpur

¹⁷ Source: Geological Study Report, Hamirpur District

3 Demography

3.1 Introduction

There are four urban settlements in Hamirpur district viz., Hamirpur (MC), Sujanpur (MC), Nadaun (NP) and Bhota (NP). As per Census 2011, Nadaun (NP) is a Class V town.

Table 0-1: Urban settlement pattern in Hamirpur District

Census Classification	Population Range	Name of Urban Settlement
Class I	100,000+	-
Class II	50000 - 99000	-
Class III	20000 - 49000	-
Class IV	10000 - 19999	Hamirpur (MC)
Class V	5000 - 9999	Nadaun (NP), Sujanpur (MC)
Class VI	Below 5000	Bhota (NP)

Source: Census of India, 2011

3.2 Population

Nadaun is a sparsely populated town with a population of 4430 people in 2011 and 9,912 in the notified Planning Area.

The planning area accounts for about 2.20% of the total population of Hamirpur district. The population distribution of Nadaun Planning area is as follows:

Table 0-2: Population Distribution of Nadaun Planning Area

Area	Population		
	1991	2001	2011
Hamirpur District	3,69,128	4,12,700	4,54,768
Nadaun Planning Area	7,075	8,885	9,912
Nadaun Town	3,379	4,405	4,430
Rest of Planning Area	3,696	4480	5482

Source: Census of India, 1991, 2001 and 2011

According to the Census of India, 2011, Nadaun Planning Area comprises 44.69% population (4430 people) residing in Nadaun town and 55.31% population (5482 people) reside in rest of the planning area.

There are 9,912 people residing in Nadaun Planning Area out of which 4970 are male (50.14%) and 4942 are female (49.86%).

3.2.2 Population Growth

Nadaun Planning Area has a decadal growth rate of 12.68% which is more than the district average of 10.20% from 2001 to 2011. The growth rate of Nadaun Planning Area is more than the district averages of both the decades (1991-01 and 2001-11). The growth rate has drastically come down from 25.58 in 1991-2001 to 12.68 in 2001-2011. This is the exclusive effect of natural population growth in the planning area.

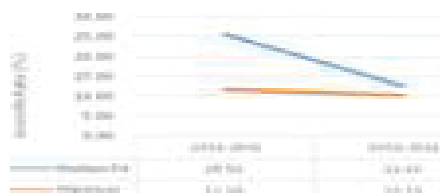


Figure 0-1: Growth Rate of Nadaun Planning Area

Source: Census of India, 1991, 2001 and 2011

3.2.2 Population Distribution

Apart from Nadaun town, the Planning Area comprises of 11 surrounding revenue villages. Out of these 11 villages, 7 villages have population less than 500 and one village Demarcated Protected Forest (DPF) Kuthar with no population. Two villages viz., Bharmoti Kalan and Tillu Khas have population between 500 and 1000. Out of the rural settlement Bela has the highest population of 2347 because of its close proximity to the Nadaun town. Refer Table 0-3.

Out of the eleven *mohals* outside Nagar Panchayat Area, Bela has the highest population of 2347 followed by Tillu Khas (649) and Bharmoti Kalan (526). The least populated villages are Harmandir Rukwala (population 100), Gagaal (population 251) and Tillu Pratham (population 335). Refer Table 0-4 for village wise population distribution in the planning area.

Table 0-3: Distribution of Settlements by Population Size, 2011

Population Range	No. of Villages	Name of Village or Town
<100	3	DPF Kuthar, DPF Tillu, Harmandir Rukwala (partly)
100-500	5	Gagaal, Tillu Pratham, Kuthar, Jalari Saunkhlan
500-1000	2	Bharmoti Kalan, Tillu Khas
1000-2000	0	-
2000-4000	1	Bela
>4000	1	Nadaun NP
Total	12	

Source: Census of India, 2011

Table 0-4: Population Distribution in Nadaun Planning Area

Nagar Panchayat/ Village Name	Population			CAGR (01-11)
	1991	2001	2011	
Nadaun NP	3379	4405	4430	0.06
Bela	1481	1856	2347	2.37
Kuthar	243	289	356	2.11
Harmandir Mandiala	322	385	458	1.75
Tillu Khas	481	461	649	3.48
Tillu Pratham	-	159	335	7.74
D.P.F. Tillu	-	4	46	27.66
D.P.F. Kuthar	-	-	-	-
Bharmoti Kalan	403	470	526	1.13
Jalari Saunkhlan	421	486	494	0.16
Harmandir Rukwala (part)	129	141	20	-3.38
Gagaal	216	229	251	0.92
Total	7075	8885	9912	1.74

Source: Census of India, 1991, 2011 and 2011

3.2.3 Sex Ratio

As per the Census of India 2011, there are 996 females per 1000 males in Nadaun Planning Area which is lesser than the district average i.e. 1095 females per 1000 males but more than the state average i.e. 972 in 2011. The sex ratio of the planning area has also decreased from 1018 in 2001 to 996 in 2011 in planning area.

3.2.4 Age-Sex Composition

A study of the Age Sex Composition of Nadaun Town reveals that the age group 05-25 i.e., the Younger age group is highest in the town. The age-sex pyramid of Nadaun Town shows that Nadaun is a developing town with broader base (more youth population) and tapping pinnacle (less elderly population).

Figure 0-2: Age-Sex Composition

Source: Census of India

3.2.5 Scheduled Caste and Scheduled Tribe Population

Out of the total population of Nadaun Planning Area, 15% of the people fall in Scheduled Caste (SC) category which is less than the district average i.e. 24% as per Census 2011. There has been a very minimal decrease of Scheduled Caste population from 16% in 2001 to 15% in 2011, in a span of ten years.

Out of the total SC population in the planning area, more than 1/3rd proportion i.e. 34% reside in the Nadaun town whereas rest 66% is distributed in the remaining areas of the Planning area.

In case of Scheduled Tribe (ST) population, there are only 59 people are from ST category which accounts to 0.59% of the total population of Planning Area as per Census 2011. Out of total 59 ST people, 54 reside in the Nadaun town and rest 5 reside in Tillu Pratham.



Figure 0-3: SC distribution in Planning Area

Source: Census of India, 2011

3.2.6 Literacy Rate

The overall literacy rate of the Planning Area is 91% which is higher than the district average i.e. 88% in 2011. There is a sharp increase in literacy rate in planning area from 87% in 2001 to 91% in 2011.

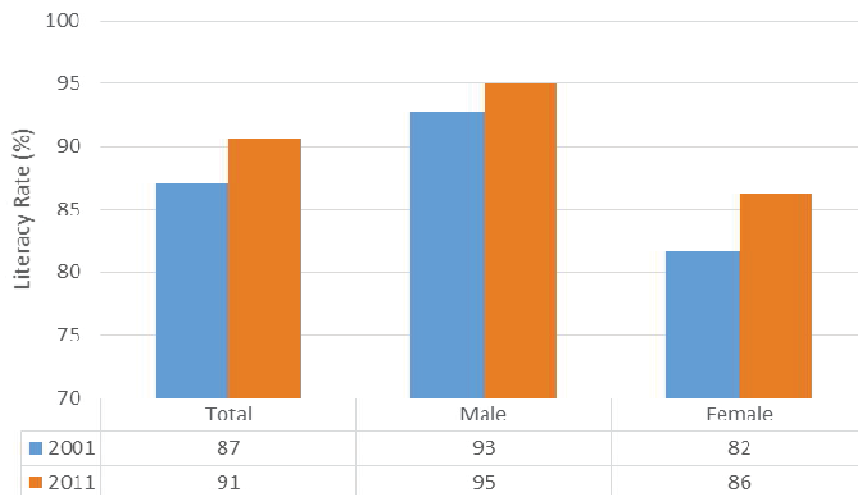


Figure 0-4: Literacy rate in Nadaun Planning Area

Source: Census of India, 2001 and 2011

3.2.7 Population Density

Nadaun Nagar Panchayat Area has a population density of 19 persons per hectare which is more than the district urban average i.e. 10 persons per hectare in 2011. The population density is stagnant since the last decade from 18.8 pph in 2001 to 19 pph in 2011.

The population density of the Planning Area is 11 pph in 2011 which is more than the district average i.e. 4 pph. The population density has marginally increased from 10 pph in 2001 to 11 pph in 2011. According to the URDPFI Guidelines, the planning area falls under very low-density area.

3.3 Population Forecast

The population of Nadaun Planning Area is expected to be in the range of 13,000 to 18,000 by the year 2035.

3.3.1 Population Projection

Five population projection methods have been employed to forecast the probable increase of population in the Nadaun Planning Area for the next twenty years i.e. up to 2035. The five projection methods are as follows: -

- Arithmetic Increase
- Incremental Increase
- Compound Annual Growth Rate
- Geometric Increase
- Exponential Increase

The forecasted population from the five methods lies is shown in the Table 0-5 below.

As the population projected by the arithmetic increase and incremental increase are very low and that by geometric and exponential growth method are moderate. The projected population by CAGR method being more appropriate to be adopted.

Hence, the projected population for Nadaun Planning Area for the year of 2035 is estimated to be 17,501 approximately at a growth rate of 2.3%.

Table 0-5: Population Projections for Nadaun Planning Area by five different methods

() Population Forecasting Method	(i) 2016	(ii) 2021	(iii) 2026	(iv) 2031	(v) 2035
(vi) Arithmetic Increase	(vii) 10721	(viii) 11451	(ix) 12180	(x) 12909	(xi) 13638
(xii) Incremental Increase	(xiii) 10458	(xiv) 10748	(xv) 10862	(xvi) 10800	(xvii) 10563
(xviii) Compound Average Growth Rate	(xix) 11106	(xx) 12443	(xxi) 13941	(xxii) 15620	(xxiii) 17501
(xxiv) Geometric Increase	(xxv) 10901	(xxvi) 11893	(xxvii) 12974	(xxviii) 14155	(xxix) 15442
(xxx) Exponential Increase	(xxxi) 10988	(xxxii) 12083	(xxxiii) 13287	(xxxiv) 14611	(xxxv) 16067

Source: Projected based on the Last Three Decades Population

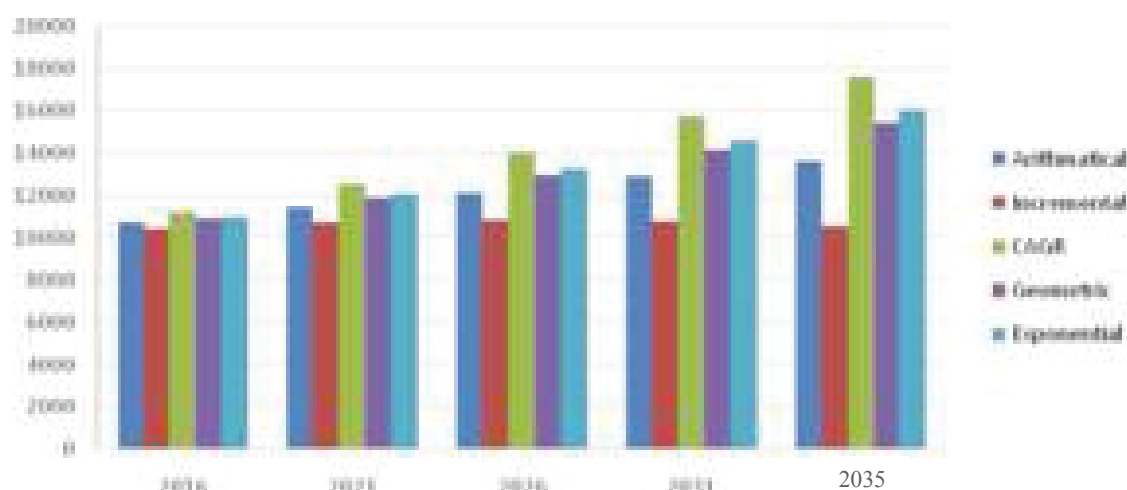


Figure 0-5: Population Projections for Nadaun Planning area by five different methods

Source: Projected based on the Last Three Decades Population

3.4 Settlement Pattern

3.4.1 Proposed Settlement Hierarchy and Facilities for 2035

Settlement planning at the sub-regional level shall be linked with on-going development process in the region and shall focus on integration with socio-economic development.

Hamirpur is a regional trade and educational centre, increasing trade and commercial activities with potential for allied agro/forest based industries in the vicinity have strong bearing on its future growth. Hence, Nadaun will also come under its influence, which will trigger the economic activity and trade between the cities and region.

Balanced settlement development strategy is essential for envisaged economic growth of the region and the planning area.

Above objective can be achieved, if the following points are kept in view:

- A balance, well-knit pattern of settlements system
- Evenly distribution of infrastructure facilities
- A road network system connecting higher order settlements with lower order
- Evenly distributed, economic centre for balance economic development sub-region
- Transport network

As the only growth centre in the planning area is Nadaun town, hence it will be going to become the only urban centre for the whole planning region. With Nadaun as a centre, Bela and Tillu Pratham with projected population of 3814 and 470 respectively, will become a part of the urban agglomeration as they are in the vicinity of the Nadaun town. Some more growth centres like Tillu Khas (1650), Jalari Saunkhlan (1257), Kuthar (903) having high infrastructure facilities which will also grow with time.

The Proposed Settlement Pattern on the basis of population is as follows:

a) Urban Centre

The first order hierarchy settlement is Urban Centre with a population range of 10,000-20,000. It shall act as small town having linkages with immediate rural hinterlands. This urban centre would cater to the rural hinterland as agro-service centre in the collection and distribution of agricultural goods and services.

It would work as a nodal centre of resource based activity centre, trade and commerce, administration, etc. The centre would have adequate infrastructure facilities with adequate resources in quantity and quality.

Hence, Nadaun Town with two adjacent villages of Bela and Tillu Pratham would form the first order of settlement.

b) Growth Centres

The Growth Centre seeks to bridge the rural urban divide. The estimated population for the Growth Centre is 5,000-10,000. The Growth Centres are the higher order village having central location and potential for development within its catchment area, with relatively better services and facilities in terms of education, health, communication, accessibility.

Table 0-6: Proposed Growth Centre in NPA

S. No.	Proposed Growth Centre
1	Kuthar
2	Tillu Khas
3	Jalari Saunkhlan

c) Basic Village

All other villages have been identified as basic villages and will be provided with basic facilities like link roads, water supply, electricity and some basic social infrastructure.

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(xxxvi)

Figure 0-6: Proposed Settlement Pattern**Table 0-7: Proposed Settlement Hierarchy and Proposed Facilities in Nadaun Planning Area - 2035**

Level	Settlement Level	Catchment range (in Km)	Total population served	Education facility	Health	Recreation	Shopping	Road connectivity
1	Urban Centre - Nadaun NP - Bela - Tillo Pratham	10 to 15	10,000-20,000	Vocational training/ Polytechnic	Maternity and Family Welfare Centre	Recreational spaces/ Play grounds	Shopping centre/ Community welfare centre	Road connectivity to other villages and Growth centres
2	Growth Centre - Tillo Khas - Kuthar - Jalari	5 to 10	5,000-10,000	Primary school/ Secondary school	Dispensary/ health sub centre/ family welfare centre	Mela ground/ cremation ground	Informal Bazaar	Road connectivity from the Town to the Basic villages
3	Basic Village - Kalan - Mandala - Rukwala - DPG Tillo - Gagal	Within the village	< 5,000	Pre- Primary and Primary school	Dispensary/ health sub centre	Basic community space	Daily need shop	All weather pucca road

Source: Proposed based on URDPFI Guidelines, 2017

4

Economic Base and Employment**4.1 Economic Base**

Nadaun has an agricultural based economy with more emphasis on trade and commerce due to its locational and geographical advantage in the region.

4.2 Employment

4.2.1 Work Participation Rate (WPR)

The total number of workers in the Planning Area is 4544 (2011 Census). The Work Participation Rate (WPR) is 46% which is lower than the district average i.e. 53% in 2011. The WPR has significantly increased from 32% in 2001 to 46% in 2011 which is more than the district average increase.

4.2.2 Main and Marginal Workers

The total workers are distributed into main and marginal works. Increase in marginal workers in an area indicates a poor trend of economic growth. In case of Nadaun Planning Area, Nadaun town has 59% (1142) of main workers and 41% (779) marginal workers as per Census 2011 whereas the rest of the planning area have 72% (1896) of main workers and 28% (727) of marginal workers. Nadaun has a large informal sector as well which is why the town area has more of marginal workers. Marginal workers have increased from 30% in 2001 to 33% in 2011.

4.3 Occupational Structure

Out of the total worker in the planning area, maximum workers (56.64%) are engaged in tertiary activities as the town is located at the cross junction of two main highways and has prosperity in trading. After tertiary, primary sector is the next priority sector with 41.64% workers engaged in farming and forestry activities due to its predominant rural character. Negligible numbers of people (1.72%) are engaged in secondary sector, comprising of household and micro scale units.

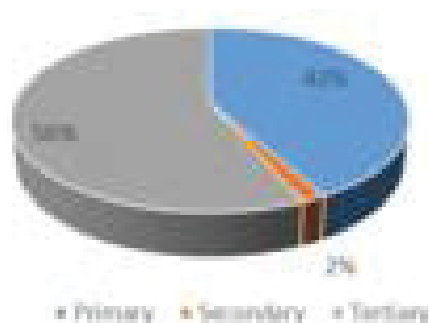


Figure 0-1: Workers Distribution

Source: Census of India, 2011

Table 0-1: Occupational Structure of Nadaun

Sector	Occupation	Percentage of Workers	
Primary Sector	Agriculture, Forestry and Fishing	42	42
Secondary Sector	Manufacturing and Repairs	2	2
Tertiary Sector	Construction Activity	30	56
	Trade and Hotels	10	
	Banking Facilities	6	
	Public Administration	6	
	Transportation and Communication	4	

Source: Census of India, 2011, Economic Survey, 2005-06

4.4 Sector wise Analysis

The sector wise analysis is very important to understand the potential economic sector in the planning area and proposals to be formulated for strengthening the same.

4.4.1 Primary Sector

As it has already been discussed that the second most important economic sector is the primary sector in terms of occupation structure (42%).

Primary sector is also, the second important sector in terms of the GDDP share during the last decade as well. Out of the total GDDP share, primary sector shared 19% during 2000-01. The share of primary sector in GDDP, has decreased over the period of time. During 2005-06 the share of primary sector fell to 14% and during 2009-10 to 11%. This is clear from the above data that people are shifting from primary sector to other sectors for the employment purposes. In spite of the above-mentioned fact, it is very important to study the primary sector as the rest of sectors are directly or indirectly dependent on it.

4.4.1.1 Agriculture

Agriculture is one of the main occupations of people in Nadaun Planning Area. Out of the total primary workers 85% are engaged in agricultural activities. The sub-humid sub-tropical climate along with sandy loam soil favour cultivation of any crops in the region. The main cultivated crops are maize (75%) and paddy (25%) during Kharif season and wheat during Rabi season. Farmers, having irrigated land, have also switched to cash crop farming like fruits and vegetables.

The total cultivable land available in the planning area is 341 ha which accounts almost 38% of the total land of Nadaun Planning Area. The amount of cultivable land in the planning area is less than the block average (Nadaun Block) i.e. 59%. Out of 341 ha, 334 ha (98%) is under agricultural use and 6.89 ha. (2%) is under horticultural use.

The total irrigated area to total cultivated area is 34% which is more than the district average. The main irrigation sources are *khads* and the Beas River.

From the Figure 0-2, it is evident that the agricultural lands are distributed uniformly in the entire planning area. The patches are mainly seen near Man khad and the river. The soil at those places are loose and porous which is suitable for cultivation.

In terms of production and trade, maize is the main crop which is produced largely in the area and in the district as well.

The maize production has been increased from 13-15 quintals per hectare in 2011 to 18-20 quintals per hectare in 2015. The growth in maize production is almost same as the district average growth. Simultaneously, the production of wheat has also been increased from 15-16 quintals per hectare in 2011 to 20-23 quintals per hectare in 2015.

Very little amount of vegetable is also produced in the area but that is for local level use only which is why the record is not available. There is no surplus remains which can be traded further.

A small local level mandi functions from Nadaun town where the trading items are maize and wheat. The market rate of maize is 800-1000 rupees/ quintals whereas for wheat it is about 1500 rupees/ quintals.¹⁸

4.4.1.2 Horticulture

The main horticultural crop in the region is citrus fruits like oranges, lemons, *amla* etc. Other than the citrus fruits, mangoes and *galgal* are also produced in the region. Out of the total cultivable area

¹⁸ Agriculture Department, Block Development Office, Nadaun Block, Hamirpur

in Nadaun Planning Area, only 2% area is under the horticultural use. Area under horticultural use in Nadaun block is 1040 ha out of which 6.89 ha (0.67%) is inside the Planning Area. The horticultural production in the block is presented in Table 0-2.

Table 0-2: Production of Horticultural Crops

(xxxvii) Year	(xxxviii) Production (MT)
(xxxix) 2011-12	(xl) 65
(xli) 2012-13	(xlii) 70
(xlili) 2013-14	(xliv) 80
(xlv) 2014-15	(xlvi) 68
(xlvii) 2015-16	(xlviii) 100

Source: Department of Horticulture, Block Development Office, Nadaun Block, Hamirpur

The production of horticulture crops in the block is showing an upward trend from 2011-12. During 2014-15, the production has gone down due to the natural calamities in the area. After that the growth has improved in the next year.

(xlix)

(I) Figure 0-2: Agricultural Area in Nadaun Planning Area

(II) Source: AGiSAC Base Map 2015

4.4.1.3 Sericulture

Sericulture is another importance sector in the economy of Nadaun. There are two major Sericulture farms in the planning area. One is located Bela village and the other just opposite Post Office. Though currently these farms are not in operation, it is proposed to revive these farms to generate employment and revenue through the interventions of Sericulture Divisional Office-Nadaun, Directorate of Industries, H.P.

Secondary Sector

Secondary sector is the least prioritized sector in Nadaun Planning Area in terms of occupational structure and GDDP share.

Secondary sector shares only 3.5% of the total GDDP in 2000-01 which has decreased to 3.2% in 2005-06 and to 3% in 2009-10. This continuous drop of share in district's GDDP amount clearly indicates that the sector is not a growing sector in this region.

In case of Nadaun, as there are no manufacturing industries only micro scale repair units and some household industries are operating at the local level whose contribution to economic development is negligible.

Tertiary Sector

Tertiary sector or the service sector is the most important sector in the planning area in terms of occupational structure and share in GDDP amount.

In terms of GDDP share, tertiary sector has the maximum percentage share in the total GDDP since 1999-00. The share of tertiary sector in 2000-01 was 78% of the total GDDP of Hamirpur district which have increased to 84% in 2005-06 and to 87% in 2009-10.

The main activities in tertiary sector in Hamirpur District are constructions (54%), trade and hotels (16%), banking facilities (11%), public administration (10%) and Transportation (7%).



Figure 0-3: Share of Activities in Tertiary Sector

Source: Economic Survey, 2005-06

Most of the employed people in Nadaun Planning area are engaged in Private services (43%) or own Business (43%), and rest of the people (14%) are engaged in govt. services. (According to the 5% sample survey in the planning area).



Figure 0-4: Occupation Structure of Employed People

Source: Field/Primary Survey

From the above analysis, it can be concluded that the main priority sector is the tertiary sector which generates maximum district domestic product and more than 50% of the people are engaged in various service sector related activities.

4.4.3.1 Trade and Commerce

Nadaun historically has been a trading centre and has commercial-cum-mixed use within the old town. Nadaun is also known as the 'Pattan' town due to its specialization in trading activities.

There are two markets in Nadaun. One is the old market area which is situated at the heart of the town and another one is the new market which has been set up near the bus stand. The old market area is basically a whole sale market specializing in wedding ceremony related articles/ items, clothes, shoes etc. whereas the new market deals in items related to modern day to day articles like electronics, mobiles, hardware, electrical apart from eateries and general grocery shops.

Commercial activities have also spread along the major spine within the present Nadaun town as well as along the National highway. Apart from the major commercial facilities, the local shopping facilities are available within the residential areas to meet the daily needs of the people.

In order to cater to the transit people arriving at the Nadaun bus stand, there are a couple of restaurants and sweet shops in bus stand area of the new market area also.

4.5 Income Structure

Income structure helps us to understand the range of people's income in a region. It helps us to comprehend about the economic capability or purchasing power of the people.

The Figure 0-5 shows that maximum respondents (38%) have the income level between 5000 to 10000 rupees per month. A person with up to 5000 rupees per month income level constitutes 34% of the total earning sample population. As 72% of the total earning population lie within the two income groups i.e., up to 10000 rupees per month, it is in consonance with the per capita income of the state i.e., Rs. 51730 in 2012-13.



Figure 0-5: Income Structure

Source: Primary Survey

4.6 Employment Generation

Considering that the Development Plan will boost the economic activities within the Planning area and create more opportunities for work, it has been estimated that there would be at least 5% boost in the WPR. Thus, the Planning area will have a WPR of 51% by 2035. The worker population estimated by 2035 will be 8926. The following Table.0-3 shows the break-up of the employment generated in each sector.

Table.0-3: Proposed Occupational Classification of Nadaun

Sector	Occupation	Number of Workers	Percentage of Workers	
Primary sector	Agriculture, Forestry and Fishing	3125	35	35
Secondary Sector	Light Industries and Composite use zone	446	5	10
	Agro- based industries	446	5	
Tertiary Sector	Construction Industry	1339	15	55
	Govt. offices	893	10	
	Institutional areas	446	5	
	Town Centre	446	5	
	Wholesale Trade (Integrated Freight Complex)	893	10	
	Transportation Hub	446	5	
	Retail Sector	446	5	
	TOTAL	8926	100	

Source: Proposed based on Analysis and Trend

4.7 Proposed Work Areas

4.7.1 Light and Service Industries

The town needs an industrial base presently a very limited number of service industries constitute the industrial sector of Nadaun.

Nadaun broad region would provide the skilled, unskilled and semi-skilled labour required for agro as well as other light and service industries. Light flatted group industries shall be permitted in the area demarcated for industries. Industries like Agro-based, Fisheries and Dairy processing, Furniture making, Engineering Products /Repair and Maintenance etc. are the sectors which is proposed to increase the Economy.

Thus an area of 10.27 Ha has been proposed in Tillu Khas to be developed as an Industrial Estate.

Mandi/ Wholesale complex

A *mandi* or whole-sale trade complex is proposed at the junction of NH-3 and MDR-36. The Development Plan proposes to develop a 1.29 ha new Mandi Complex including Wholesale Markets at Jalari. This location provides appropriate linkages for the incoming goods, outgoing goods and distribution of wholesale goods in the town.

This will also include activities closely related to trade like financial institutions, administrative services, business entrepreneurship, people related retail market facilities and other public conveniences.

A Vegetable packing house, Cattle Feed *Godown* and a Cold Storage is also proposed in the town by TCPD under Annual Administrative Report (2014-15).

4.7.3 Retail

Retail shopping areas are necessary for creating an image for any town. Presently there are no organized retail areas in the planning area. To accommodate the required shopping, commercial offices, and other activities like cinema, hotel and related facilities, the following three-tier system of commercial development is proposed.

- Level I Town level
- Level II Community level
- Level III Neighbourhood level

4.7.3.1 Level I –Town Centre

One town centre is envisaged and strategically located to serve the town. The town centre is proposed to be developed at Tillu Pratham village. It will be developed on 5.7 ha of land (2.3 for commercial and 3.4 ha for public semipublic use).

4.7.3.2 Level II –Community Centre

The Community centers are major shopping complexes, which will comprise of Shops, Weekly Markets, Post office, Dispensary, Petrol Pump and are also the centers of socio-cultural activities where the people get together. One Community Center have been proposed in the Development Plan for a population of 15,000 of an area of about 0.50 hectares.

4.7.3.3 Level III – Neighborhood shopping centers

Within the residential land use, in new developments, two categories of shopping centers shall be provided:

- Sector-level shopping centre-45 to 50 shops for a population of 5000 persons.
- Convenient shopping centre-10 to 15 shops for a population of 1000 persons.

4.7.3.4 Informal sector

The informal sector trade and services are scattered within the Planning area. The informal sector units locate themselves strategically near work centers, commercial areas, outside the boundaries of schools, colleges and hospitals, transport nodes and near large housing clusters. It is proposed to integrate the informal sector in trade and services in the planned development.

In all the future developments, 1% of the total area will be reserved for informal sector/ vendor market development. This area shall have temporary construction not to be included in coverage and FAR. At appropriate locations, reservations shall be made for night shelters. Attractive design shall be prepared for the space for stationary and mobile vending.

4.7.3.5 Weekly markets

The weekly markets and *haats* are a vital characteristic of Indian cities and have a sense rich cultural identity attached to them. Spaces shall be allotted for weekly markets in the town centre area.

Site with an area of about 0.4 Ha for weekly markets is included in the town centre.

Housing

5.1 Introduction

The population of Nadaun Planning Area as in census 2011 is 9,912 and the number of Households is 2219. To understand the housing condition and situation of Nadaun Planning area a survey of 5% household was conducted in February 2016. 111 household were surveyed. Apart from socio-economic aspect housing characteristics were also studied.

NH
-
303

NH -3

N
H
-3

(lii)

Figure 0-1: Settlements in the Planning Area

Source: Base map provided by AGiSAC

5.2 Household Size

Nadaun Planning Area has a household size of 4.5 as per Census of India, 2011. Table 0-1 shows that the household size has decreased from 5.2 in 1991 to 4.5 in 2011.

Table 0-1: Year wise population in the Planning Area

(lii) Year	(li) 1991	(li) 2001	(li) 2011
(lii) Population	(lii) 7075	(lii) 8885	(lii) 9912
(lii) No. of HH	(lii) 1348	(lii) 1804	(lii) 2219
(lii) HH size	(lii) 5.2	(lii) 4.9	(lii) 4.5

Source: Housing Census, Census of India

5.3 Housing Typology

There are majorly three type of housing typologies found in the planning area:

- Courtyard houses
- Row houses/ semi-detached houses
- Detached houses

The Nadaun town being an old settlement has majorly courtyard houses with minimal setback and large courtyard in the centre / towards the rear side used for agriculture, cattle sheds or for other household activities

With the implementation of TCPD Rules, new houses or redevelopment of the old housing stock is proposed to be re-constructed in the form of row houses or semi-detached houses depending upon the area of the residential plot in the Nadaun town.

The rest of the planning area mostly have detached houses apart from *abadi* areas where courtyard/ row houses and semi-detached houses are also observed.

5.4 Condition of Housing

Census of India has classified the condition of housing into three categories namely good, liveable and dilapidated. As per Census 2011, 80% of the houses are in good condition, 14% are liveable and 5% are in dilapidated condition. There is a need of new housing stock to replace the dilapidated houses and cater to the housing demand of the planning area.

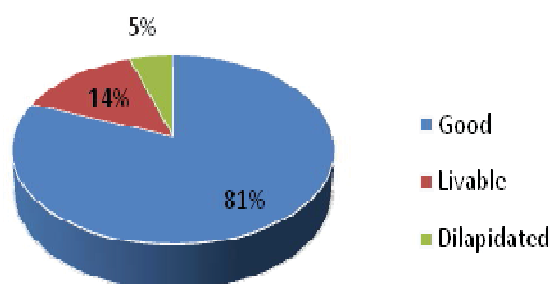


Figure 0-2: Condition of Houses

Source: Census 2011

5.5 Age of Structure

According to the primary survey conducted 54% of the houses were built more than 20 years ago and only 23% of the houses are built less than 10 years ago. As Nadaun is an old town most of the houses are traditional and more than 20 years old.

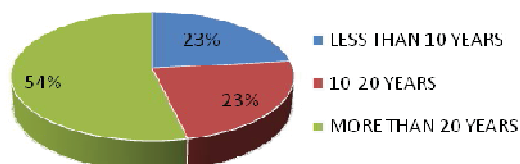


Figure 0-3 Age of Structure in Nadaun Planning Area

Source: Primary Survey

5.6 Structure Use

The structure use pattern as categorized by Census 2011 shows that, 98% of the total houses in Nadaun are purely residential and only 2% have mixed use (residential cum other use). The residential cum other use structures are located in the old market area (Pattan Bazaar) within the Nadaun town as well as along the National Highway.

5.7 Type of Structures

Census of India was classified into permanent, semi-permanent or temporary based on the type of material use in construction of wall and roof. In Nadaun, nearly 68% houses are permanent, 23% houses are semi-permanent and (9%) houses are of temporary structure.

Figure 0-4: Type of Structures

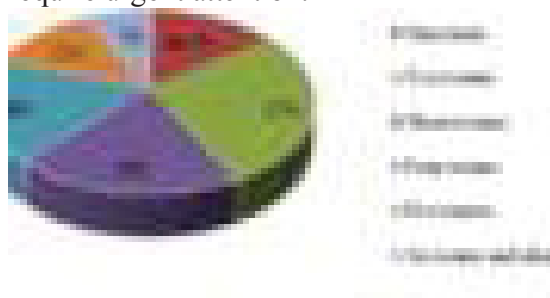
Source: Census 2011

5.8 Building Material

As per primary survey it is observed that about 75% households have RCC roof on their house; nearly 20% have tiled roof and another 5% have 'Grass' thatch, etc., as the material for the roof. For wall, nearly 91% households have reported use of 'Burnt brick' and about 8% 'Mud / unburnt brick'. Nearly 89% households have cement flooring and about 11% households have mud flooring.

Figure 0-5: Material of Roof*Source: Primary Survey***Figure 0-6 Material of Floor***Source: Primary Survey***Figure 0-7: Material of Wall***Source: Primary Survey***5.9 Dwelling Unit Size**

The quality of life of a person depends (among other factors) upon the size of dwelling unit available to them. According to the Census 2011, 27% of the household live in 2 room dwelling unit. 20% households live in 3 room dwelling unit. 15% households live in one room dwelling unit. As the household size for Nadaun is 4.5, for good living conditions at least a two room dwelling unit is essential. 15% of the households are living in smaller dwelling unit hence, these deprivations require urgent attention.

**Figure 0-8: Dwelling Unit Size***Source: Census 2011*

5.10 No. of Stories

According to the primary survey most of the housing is plotted housing with average plot size ranging from 500 to 1000 square feet. The structures are predominantly ground floor with a few buildings having two to three-storied structures.

5.11 Ownership Status

As per Census 2011, 94% of the houses are owned and remaining 5% of the houses are occupied by tenants, this indicates most of the people of Nadaun are natives and permanent residents of the town. As the in-migration is increasing in the planning area, there has been an increase in the demand for rental housing as per the primary survey.

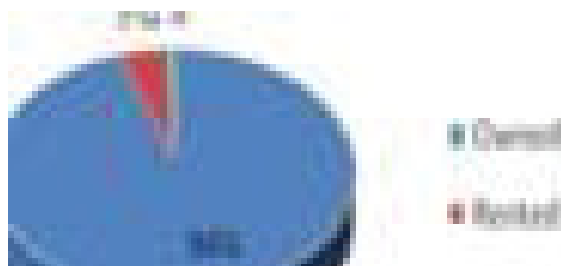


Figure 0-9: Ownership Status

Source: Census 2011

5.12 Housing Need

The demand of housing in the year 2035 is calculated on the basis of projected population, household size and current housing shortage. The Development Plan proposes to facilitate the provision of a fully serviced dwelling unit for each family and reduce the gap between housing shortage and supply through suitable measures.

Table 0-2: Housing Forecast

Population 2011	9,912
Population 2035	17,501
Additional Population 2035	7,589
Household Size	4.5
Additional Housing Need	1,686
Present Housing Shortage - Due to Dilapidated and Temporary Structures	311
Total Housing Need	1,997

Source: Estimation based on Census data

The forecast has been based on the following assumptions:

1. Anticipated population growth as per the growth rates assumed;
2. Constant annual household formation rate for the entire Planning Area;
3. Replacement of dilapidated (5%) and temporary structures (9%).

The additional housing units shall be provided in the following manner:

- New Residential Developments: 1,686 dwelling units
- Infill in existing residential areas: 311 dwelling units

Table 0-3 gives the details of housing needs every five years and shows the housing need zone wise.

Table 0-3: Year wise Housing Need

YEAR	Additional Population	Additional HH	Housing Need
2016	1194	265	576
2021	2531	297	297
2026	4029	333	333
2031	5707	373	373
2035	7589	418	418
TOTAL		1686	1997

Source: Estimation based on the Census Data

5.13 Housing Strategy

Planning norms, land use zoning, density, FAR, and building controls have been reviewed for housing, both in new areas to be opened up development and for redevelopment of existing areas. In the context of housing strategy, it is essential to optimise utilization of land and space with a view to increasing net residential density.

There are following aspects that should be focused for new public housing development –

- Strategy for Land Assembly/ pooling
- Finance and Incentives
- Human Resource Management and E-governance
- Public Private Partnership and People Public Private Partnership model
- Retrofit measures to make the existing building stock energy efficient and to overcome the various environmental challenges posed by the sector.
- **Retrofitting of dilapidated houses-** In case of dilapidated structures, if structure is below 50 years, it should be retrofitted, if structure is above 50 years, it should be demolished and the occupants should be relocated.

The additional 1997 housing units can be achievable by the participation of Government Departments/Agencies and Private Agencies under the following strategies-

- i) State Government should provide proposed developable land in the Development Plan for government agencies and private sectors.
- ii) Major infrastructures like major roads, water supply lines, sewage layout, power lines and other basic infrastructure to be developed.
- iii) Private sectors should be encouraged to construct new houses with basic infrastructure as per requirements.
- iv) Use of local available building materials should be encouraged by the government.
- v) More development in the central part of planning area to be avoided except the areas where proposals have been given in Development Plan.
- vi) Clearance of Building Plan and Land Development/Layout Plan before construction/development should be strictly imposed by the Government under the Himachal Pradesh Town and Country Planning Rules, 2014.

Strict compliance of the Building Regulations should be enforced by the authority, in regard to the following-

- Structural Design
- Structural Design Basis Report
- Seismic Strengthening/Retrofitting
- Certification Regarding Structural Safety in Design
- Constructional Safety
- Quality Control and Inspection

- Structural Requirements of Low Cost Housing
- Inspection

5.13.1 Housing for Various Income Groups

The Development Plan recommends identification of priorities in dealing with different segments of the population. Out of the total demand, income category wise demand would be as given in Figure 0-10. Fixing the priority in dealing with different segments of the population:

1. H.I.G. and M.I.G. dwelling units shall be provided with only developed land at market price to cross subsidize the housing for E.W.S./L.I.G.
2. L.I.G. and E.W.S. should be covered under site and services scheme and finances provided through various centrally and State sponsored schemes.



Figure 0-10: Housing demand as per income category

Source: Census of India

On the basis of the emerging trend in the proportion of population occupying 1-2 rooms, 3-4 rooms and 5-plus rooms by comparing the 2001 and 2011 Census data, a distribution in the above categories for 2035 have been projected as under

Table 0-4: Proposed Distribution of Households by Housing Category

Category	No. of Rooms	Proportion of Households		
		2001	2011	2035
E.W.S./L.I.G	1-2	58%	42%	26% (519)
M.I.G.	3-4	29%	38%	47% (939)
H.I.G.	5+	13%	20%	27% (539)

Source: Estimation based on the study

Housing by Various Agencies

On the basis of the above studies, a possible indicative scenario in terms of housing supply by different agencies emerges as under:

Table 0-5: Distribution of Housing by Supply Agencies

Agency	Housing Categories		
	E.W.S./L.I.G	M.I.G.	H.I.G.
HIMUDA	80%	20%	-
Employee/Cooperatives	12%	50%	30%
Private	8%	30%	70%

Source: Estimation based on the study

Employee housing by the government bodies such as HPSEB, IPH, etc. will come up initially which follows the emergence of cooperative societies by the Private developers and Builders in the future.

6

Traffic and Transportation

6.1 Road Network

Nadaun Town, located at the north-western side of Hamirpur district, is accessible by two NHs viz., NH-3 (known as Atari-Manali Highway) which connects Nadaun with Amritsar-Jalandhar-Hoshiarpur-Hamirpur-Mandi-Kullu and NH 303 (known as Nadaun-Nagrota Road) which connects Nadaun with Nagrota via Ranital-Jwalamukhi. Nadaun is well connected with Sujanpur, the Tehsil headquarter of the neighbouring Tehsil by MDR-36.

6.2 Road Inventory

About 5.24 km and 1.52 km of NH-3 and NH-303 passes through the planning area respectively. Out of the total length of NH passing through the planning area, 2.02 km stretch of NH-3 and 0.86 km of stretch of NH-303 act as the urban road in Nadaun town. The NHs are two lane undivided roads in the planning area with 1.5m shoulders on the both sides. The NHs have an average ROW of 10m with 7m carriage way with 1.5m earthen shoulders on both sides used as parking, footpath and service corridor. There are no walkways inside the planning area and vehicles are parked along the road. This creates a lot of congestion inside the urban area.

The length of the MDR 36 passing through the planning area is 630m. It is a single lane road with 5m carriage way and 1m earthen shoulder at both ends.

The roads in the planning area have been made according to required standards set by NHAI and IRC.

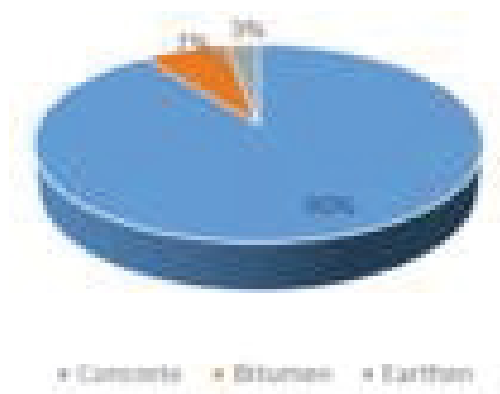
6.3 Road Condition

The road condition in the planning area is satisfactory in terms of the materials used for the construction of roads and the level of maintenance.

The roads in the planning area are constructed and maintained by multiple authorities. NHs are maintained by NHAI which are entirely metalled roads. However, some portions near Gagaal (almost 200m to 400m) are under construction that creates delay in the traffic movement and produces dusts which reduces the visibility. The MDR and ODRs are maintained by PWD. Under PWD, 93% roads are metalled and rest are non-metalled roads.

The other urban roads are maintained by PWD and Nagar Panchayat while the village roads are maintained by PWD and respective Gram Panchayat.

Three types of roads can be seen in Nadaun Nagar Panchayat in terms of material used i.e. Bitumen, Concrete and Earthen roads. Out of the total roads, 90% are made of concrete, 7% bitumen and 3% earthen. The 3m (10ft.) wide roads/streets are mainly bitumen made. All the bituminous roads in the Nagar Panchayat Area are 3m wide.

**Figure 6-1 Types of Materials**

Source: PWD office, Nadaun

The following table shows the different types of roads in Nagar Panchayat Area and their lengths and width.

Table 6-1: Village Roads, Nadaun Planning Area

S. No.	Village Name	Length of the Roads as per Base Map(In Metres)	Remarks
1	Kot	6330.37	Both side drains on 0.9-1.0 km of road length
2	Seri	4759.90	Both side drains on 500m of road length
3	Dolee Gharan	1259.49	-
4	Nagarada	2404.46	-
5	Kuthar	1710.19	1000m Kutcha road
6	Bharmoti Kalan	3892.25	Both side drains on 3000m of Kutcha road
7	Jalari Saunkhlan	1186.49	Construction of both side drains in progress
8	Harmandir Mandiala	2199.32	Kutcha drains
9	Harmandir Rukwalan	381.75	Kutcha drains
10	Bela	11801.73	300m of Pucca drains rest Kutcha
11	DPF Kuthar	651.21	-
12	DPF Tillu	1441.42	500m of pucca road rest Kutcha
13	Tillu Pratham	9.93	500m of kutcha road rest pucca
14	Tillu Khas	2776.61	500m of kutcha road rest pucca
15	Gagaal	621.82	500m of kutcha road rest pucca
	TOTAL	41426.94	

Source: Sub-divisional Office, PWD, Nadaun

Table 6-2: Roads Maintained by Nagar Panchayat

Types of Roads	Length of different roads			Total Length (km)	Percentage
	3m (10ft)	2.5m (8ft)	1.8m (6ft)		
Bitumen	1.31	-	-	1.31	7.29%
Concrete	2.20	5.50	8.48	16.18	89.99%
Earthen	-	0.18	0.31	0.49	2.72%

Source: Nagar Panchayat, Nadaun

As per the residents during the primary survey, during rainy season the un-metalled roads create problem for pedestrians as well as vehicle users the. The rolling topography reduces the durability of the earthen roads.

6.4 Vehicle Growth

Vehicular growth rate in the region puts light on the fact of future traffic pattern. Increase in the number of private vehicles envisages the increase in the traffic volume in the town. It would put more pressure on the existing roads and creates congestion on a larger run if necessary measures are not taken.

The, depicts the average annual growth rate is 9% from 2011 to 2015. The highest growth rate was experienced in 2013. After that, there is a steady fall in overall vehicle growth till 2015.

**Figure 6-2: Vehicle Growth, 2011 to 2015**

Source: SDM Office, Nadaun

The maximum registered vehicles are mainly the two wheelers (71%) and cars (21%).

Tractors, HGVs, three wheelers and others fall in the remaining (8%). This clearly illustrates the local roads occupied by the two wheelers and cars. The percentage of buses is very less. Only 18 buses have been registered in the last five years.

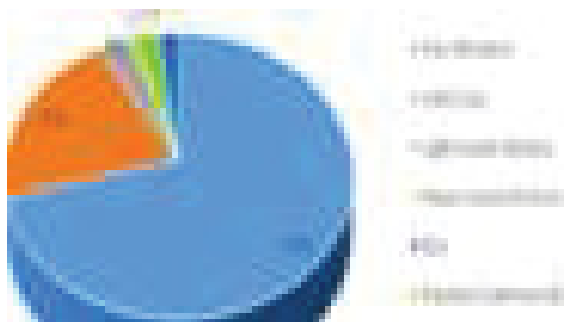


Figure 6-3: Vehicle classes

Source: SDM Office, Nadaun

6.5 Existing Traffic Scenario

Traffic survey has been conducted for 12 hours for three days in February 2016 in Nadaun Planning area to understand the traffic scenario in and around the planning areas. The surveys have been conducted at three outer cordons on NH-3 and NH-303 to capture the through, outgoing and incoming traffic. The two types of surveys conducted viz., Origin and Destination survey and Traffic Volume Count Survey has been conducted for assessment of passenger and freight traffic and to measure Level of Service respectively. The traffic survey was conducted at Beas Bridge on NH-3 and near Jalari village on NH-303 and at Amb Road again on NH-3.

6.5.1 Traffic Pattern

(53%). About 24% of total trips terminate at Nadaun and another 19% trips are generated from Nadaun. The share of trips within Nadaun account to only 4%. This is to be noted that the planning area gets maximum through traffic daily.

6.5.2 Traffic Volume

The volume of traffic is highest at cordon point 1 i.e. the Beas Bridge point (6609 PCUs) which connects the Kangra district with Hamirpur district. Thereafter the traffic gets bifurcated into two. One goes towards Hamirpur-Sujanpur-Bilaspur and then towards Shimla and another goes towards Amb-Una and then to Chandigarh. This is the reason, cordon point 2 and cordon point 3 get half of the traffic volume than of cordon point 1. i.e., 4384 PCUs and 5564 PCUs respectively.

6.5.3 Modal Split

There is maximum two wheelers (44%) share followed by car (35%) and. HMV (passengers) i.e. the buses follow after two wheelers and cars with average share of 6% at three different points. LMV (goods) and HMV (goods) account for 6% and 5% to the total modal share respectively.

6.5.3.1 Level of Service (LOS)

The Level of Service (LOS) of two lanes highway with earthen shoulders has been presented in Table 6-3.

Table 6-3: Level of Service in terms of Traffic Volume

Days	Traffic Volume in PCUs at Point 1	V/C	Level of Service	Traffic Volume in PCUs at Point 2	V/C	Level of Service	Traffic Volume in PCUs at Point 3	V/C	Level of Service
Day 1	7609	0.72	(C)	4447	0.48	(A)	6243	0.61	B
Day 2	9083			4163			5765		
Day 3	3134			4541			4685		
Average	6609			4384			5564		

Source: Primary Survey

Cordon point 1 i.e. Beas Bridge which connects Nadaun with Kangra district has category C Level of Service. Cordon point 2 i.e. the Jalari road which connects Hamripur has category A Level of service and cordon point 3 i.e. the Amb road which connects Nadaun with Amb and Una has category B Level of Service.

As per the present Level of Services, the Nadaun-Amb section of the NH-3 passing through the Planning Area has a stable flowing, at or near free flowing traffic. The ability to maneuver through lanes is noticeably restricted and lane changes require more driver awareness. Most experienced drivers are comfortable, roads remain safely below but efficiently close to capacity, and posted speed is maintained.

The Nadaun-Hamirpur section of NH-3 is reasonably free flow. Traffic speeds are maintained, maneuverability within the traffic stream is slightly restricted. Motorists have a high level of physical and psychological comfort.

The Nadaun-Nagrota section of NH-303 passing through the planning area has free flowing traffic. The traffic flows at or above the posted speed limit and motorists have complete mobility between lanes. Motorists have a high level of physical and psychological comfort.

Figure 6-4: Present Level of Service of Different Roads
Source: Analysis based on Traffic Survey

Table 6-04: Level of Service Criteria

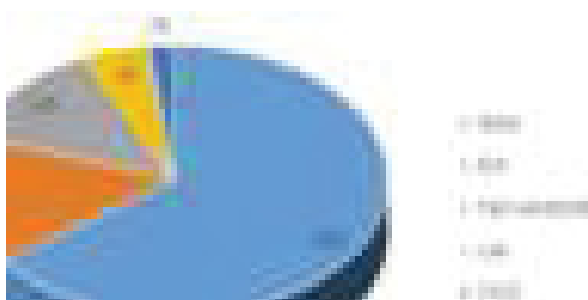
Level of Service	Description	V/C
A	Free-flow conditions with unimpeded maneuverability. Stopped delay at signalized intersection is minimal.	0.00 to 0.60
B	Reasonably unimpeded operations with slightly restricted maneuverability. Stopped delays are not bothersome.	0.61 to 0.70
C	Stable operations with somewhat more restrictions in making mid-block lane changes than LOS B. Motorists will experience appreciable tension while driving.	0.71 to 0.80
D	Approaching unstable operations where small increases in volume produce substantial increases in delay and decreases in speed.	0.81 to 0.90
E	Operations with significant intersection approach delays and low average speeds.	0.91 to 1.00
F	Operations with extremely low speeds caused by intersection congestion, high delay, and adverse signal progression.	> 1.00

Source: Transportation Research Board, Highway Capacity Manual

6.5.4 Trips

Commercial and Business trips accounts for 67% of the total freight trips in the Planning Area where as social trips account for the maximum passenger trips (80%).

Almost 80% of the internal trips i.e., within Nadaun are completed within 15 minutes time period. It indicates the work place or other level of services are not very far from the houses in the Planning area. Most of the trips are generated from Nadaun Town and Beal village (64%) and terminated in Nadaun Town, Gagaal and Jalari (70%). Out of the total internal to internal trips, 59% trips are made for business purpose and 41% trips are made for work purposes.

**Figure 6-5: Mode of Transport Usage**

Source: Primary Survey

Out of the total household trips, 65% people walk to the destination whereas 15% use public transport (bus) to commute to destinations, 13% use two wheelers and 5% use cars. Very few (2%) use cycles as a mode of transport.

6.6 Public Transport System

Nadaun town has efficient intercity public transportation system. Public transport is used for commuting to long distances like Kangra, Hamirpur, Amb-Gagret, Sujanpur, Dhera, Shimla, Chandigarh etc.

The transportation within Nadaun and surrounding areas is based on privately and government operated buses. Nadaun has a large bus station (bigger compared to towns of similar size in this area). A taxi stand is adjacent to it where one can easily rent a taxi for commuting short or long distances.

6.6.1 Bus

Bus is the main mode of public transport in Nadaun. The town is well-connected with important towns and centres within and outside state by govt. roadways (HRTC) and private buses, Nadaun has a designated bus terminus located in the centre of the city at Inderpal Chowk.

Buses are available in every 20 to 25 minutes for the neighbouring towns, located within 50km. like Hamirpur, Sujanpur, Amb, Una, Jwalamukhi, Galore, Kangra etc. Towns located within 100km, have bus connectivity in every 60 to 90 minutes. Towns sited beyond 100 km. have bus services twice or thrice from the town. There is also a Volvo bus service operated by HRTC with connects Nadaun with National Capital of Delhi daily.

There is no intra-city public transport system in Nadaun.

6.6.2 Ferry

Though Nadaun does not have a well-developed inland waterways system. But, there are two row boats which ferry people across the Beas River. Such facility is available on two sides of the planning area. One on the north-western side near Pattan Bazaar adjacent to present day SDM Office and the other on the north-eastern side near the Nadaun Fort. There is a nominal fee charged to ferry people from one side to the other.

6.7 Parking Facility

There is no designated on street or off-street parking spaces available in the town or the planning area. The taxi drivers mainly park their vehicles at the Kharidi Ground near the bus stand. The Kharidi ground is used primarily for commercial vehicle parking only. The private vehicles are parked all along the main arterial road. This on street un-regularized parking creates congestion in the town and hampers the traffic movement.

6.8 Pedestrian Pathways

There are no designated pathways for the pedestrian movement in the town. The 1.5m shoulders at both ends are used as pedestrian's walkways. Most of the time these shoulders are encroached and used as the parking space. In absence of the designated walkways in the town and planning area, pedestrians use carriage ways for the movements which often leads to accidents.

Pedestrian pathways are required in the town and the planning area because most of the trips are made through walking. From the primary survey, it has been seen that 87% of respondents make one trip (internally mostly) per day in the planning area. More than 65% of the sample household trips are made through walking. This is the reason that pedestrian pathways are very much required infrastructure in the planning area.

6.9 Issues and Concerns

The issues related to Traffic and Transportation are as follows:

- a. Some of the stretches of the metalled roads are very bad in condition which is not motor able and produces lots of dust that reduces the visibility.
- b. No designated parking area is available within the town that leads to random parking along the road which creates congestion inside the town.
- c. No designated pathways are available within the town for pedestrian movement. Pedestrians use carriage ways for the movement inside the town which leads to the fatal and non-fatal accidents.
- d. The level of service is C for the Kangra connecting road which needs to be modified.
- e. More than 50% of the traffic entering the planning area is through traffic and creates a lot of congestion inside the town.
- f. No street furniture is available inside the urban area. Due to the unavailability of the street furniture like signage, traffic lights, zebra crossings, marked carriage ways, illuminating dividers, street lights the traffic movement gets slowed down and creates congestion.

6.10 Proposals and Recommendations

1. Considering 5% growth rate as per planning commission projection of traffic (Annexure 3). The estimated traffic on NH-303 near PWD rest house towards Kangra is approximate 10000pcus which has been divided in approximate half in two directions at the Bus stand junction one towards Hoshiarpur and one towards Hamirpur.
2. Traffic on NH-303 near PWD rest house towards Kangra shows that it will cross the capacity of 2-lane paved shoulder in year 2017. So 4 lane paved shoulder is recommended.
3. The same traffic will enter in town area and due to highly congested area. A bypass for one direction traffic (Kangra to Hamirpur).has been suggested as expansion of road in town area is not possible.

6.11 Proposed Road Network

To improve the regional connectivity as well as accessibility to various planning zones within Nadaun Planning Area, augmentation of the road network across various planning zones is proposed with connections to the regional linkages. A system of bypass roads has been suggested which will provide bypass alignments to regional traffic movement without entering the congested core areas of the planning area. A by-passes have been proposed i.e. Beas Bridge-right bank of Beas (outside the planning area) - Nadaun Fort –Tillu Khas-MDR-36 at Jalari Saunkhlan.

Proposed urban road network showing the major Urban Arterials and Secondary Arterials along with connections from Regional Arterials is shown in the Proposed Land use Map (Map No. 1432/IPD/NPA/P/01) Only higher order arterial roads have been outlined in the new areas while lower order roads can be suitably developed while preparation of detailed plan.

6.12 Improvement and Upgradation of the Existing Road Network

It has been found that intersections in Nadaun reach their saturation capacity much earlier than the links. Also, as intersections are closely spaced within the core area, they contribute more to the network congestion compared to links. However, both intersection and links require upgradation to increase the capacity to cope with the existing traffic demand. A general set of recommendations is listed which can be suitably adopted to upgrade the intersections.

Selected measures for improvement of intersection capacity are listed as follows:

- Possible widening and correction of horizontal and vertical alignment.
- Installation of traffic signals with appropriate signage at strategic points.
- Removal of visual obstruction to increase sight distance and facilitate turning maneuvers.
- Installation of pedestrian crossing preferably grade separated to segregate pedestrian and vehicular movement at intersections. For at grade pedestrian crossings, the movement should be synchronized with the signal phases.
- The remote and interior parts of the planning area will be on priority for augmentation of transportation network.

Selected measures for improvement of link capacity are listed following-

- Widening of the carriageway, wherever possible.
- Creation of pedestrian facilities on both sides to segregate pedestrian and vehicular traffic flow.
- Appropriate railing and fencing arrangement along pedestrian walkways.
- Illumination of the road links to facilitate night time movement.
- Improvement of the road side drainage channels, not only to create additional road space but to protect the pavement from deterioration.
- Road surface stabilization and appropriate arrangement for cross-road drainage (water streams and falls).
- Restriction of on-street parking along congested links, especially during peak hours.
- Installation of traffic signages and signals for pedestrian crossing preferably synchronized with intersection signals. Some busy links might require grade separated pedestrian crossings.

6.13 Pedestrian Facilities

The roads in Nadaun have no footpaths for pedestrian movement, which forces the people— forcing them to move along the carriageway and are prone to accidents.

As walking is the only effective Non-Motorized Transit (NMT) mode, management of pedestrian facilities can boost significantly the patronage for NMT movement within Nadaun Planning Area

- (i) Walkways at least 1.5m to 1.8m and cycle track of at least 1.5m to 2.0m on both sides of the carriageway to segregate pedestrian traffic from vehicular carriageway.
- (ii) Complete restriction of on-street parking on pedestrian pathways – even if they are lying empty.

6.14 Parking Management

Creation of off-street parking facilities at strategic locations, preferably multi-storied is required to relieve the parking load from the vehicular carriageway and to meet the parking demand.

There is a need to restrict (completely or partially) on-street parking activity to increase the capacity of the roads and improve traffic flow.

A parking management plan must be prepared for the entire planning area.

The plan proposes the following:

- a) Parking lots have been proposed on vacant government, land (if available) near concentrated parking generation zones like market area.
- b) Parking space provision has been incorporated in building bye laws considering its adequacy in the context of growing vehicle ownership.

Apart from parking of cars, significant numbers of taxi, jeep, LCV and trucks are found to be parked along some of the links. Idle bus parking should be restricted to dedicated bus stands. Taxi parking should be encouraged only at certain location where its parking will not interfere much with the vehicular flow.

7

Heritage and Tourism

7.1 Heritage

Nadaun is a host to a lot of Natural as well as Man-Made Heritage. Nadaun being located on the bank of Beas River makes a picturesque profile which even attracts the tourists is the most important Natural Heritage of the town. In terms of Man-Made Heritages, the town is full of such heritages but now they are in dilapidated condition due to ignorance and non-maintenance.

7.1.1 Natural Heritage

7.1.1.1 The Beas River:

Nadaun is placed on the banks of Beas River. A favorite pastime of people of Nadaun is **evening walk to the Nadaun Bridge**. There are many restaurants which have come up in this area. This Bridge provides fantastic views of Beas River and of sunset. This bridge separates Hamirpur district from Kangra district. Another interesting pastime is **river-cruise** in a small wooden boat. One can enjoy this ride the whole day. The boat is still used as a mode of transport.

There is a proposal by the State Tourism Department that on a 16 km stretch from Dhera Bridge to Nadaun Town would be used for promoting water sports viz, river rafting. It would attract the tourists in huge number. The river front can be developed nicely for the recreational purposes of citizens of Nadaun and tourists also.

7.1.2 Man-made Heritage

As Nadaun has a rich history dating back to the 17th century, it has quite a number of heritage buildings, monuments and structures.



Figure 0-1: Places of Tourist Attractions, Nadaun

Source: Field Survey

7.1.2.1 Nadaun Fort

Nadaun fort is better known as Amtar-Nadaun fort/ Sansar Chand fort, which was once the royal residence of Raja Sansar Chand. This Fort attracts visitors by its impeccably done wall paintings and frescoes. Unfortunately, the fort is in a dilapidated condition but it still manages to put visitors in awe with its exquisite architecture. It is an ideal place that reflects the rich history of Raja Sansar Chand and the Katoch dynasty. The fort is in a dilapidated state but still representative of family of Maharaja Sansar Chand Katoch reside there. The Govt. should acquire, protect and conserve the premises.

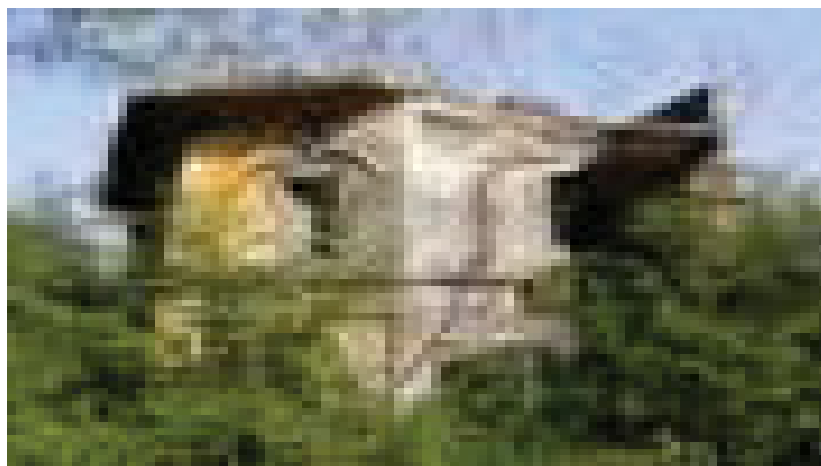


Figure 0-2: Nadaun Fort

Source: Field Survey

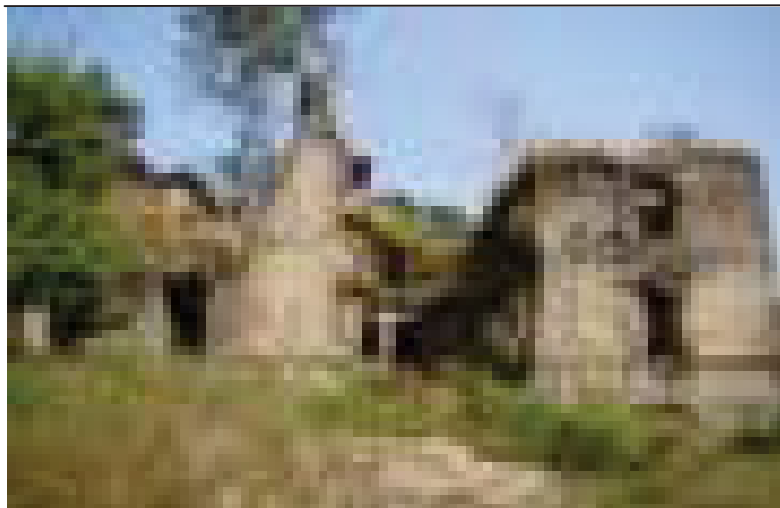


Figure 0-3: Nadaun Fort

Source: Field Survey

7.1.2.2 Gurudwara Shri Patshahi Dasvin

It is located in Nadaun town on the banks of Beas River where Guru Gobind Singh camped for nine days during the battle of Nadaun, between Raja Bhim Chand and Mughal General Alif Khan. Guru Saheb assisted Raja Bhim Chand and won the battle against Mughal General. The spot later on converted in a Gurudwara by the order of Maharaja Ranjit Singh. However, the present building was constructed by Rai Bahadur Baisakha Singh in 1929.



Figure 0-4: Historical Gurudwara, Nadaun

Source: Field Survey

7.1.2.3 Samadhi of Dhyanu Bhagat

Dhyanu Bhagat a true devotee of Maa Jwalaji, offered his own head to the Goddess to prove the power of Maa Jwalaji to the then Mughal Emperor, King Akbar. The Samadhi to the great devotee is in Nadaun and an important heritage and pilgrimage site.

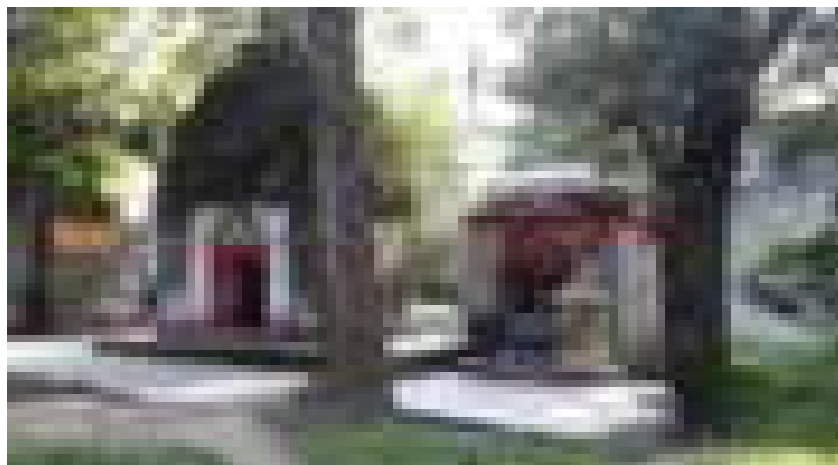


Figure 0-5: Samadhi of Dhyanu Bhagat

Source: Field Survey

7.1.2.4 Baoli or Step Wells

There are a number of *baolis* or step wells in Nadaun which were the major sources of water to the town. One of the famous step-well is a 105 stepped *baoli* located along the NH-3 in Gagaal village. The step-well is now in a very dilapidated state and has been filled with mud. Refer Figure 0-6.

7.1.2.5 Paudiyan or Steps Ghats

There are a number of paudiyan or stepped ghats along the Beas River in the Nadaun town. Few of the most famous ones are the following:

1. Pattan di paudiyan - located near the SMD office
2. Matta wali paudiyan
3. Kaaji Pattan paudiyan - near Samadhi of Dhyanu Bhagat

These paudiyan are in a dilapidated state and needs to be conserved and preserved due to its heritage value.



Figure 0-6: Baoli at Gagaal

Source: Field Survey



Figure 0-7: Pattan Bazaar di paudiyan

Source: Field Survey

7.1.2.6 Lavneshwar Mahadev Temple

This is a famous Lord Shiva temple. It is believed that construction of Lavneshwar Temple was initiated by the Pandava's. A popular belief about the Shivalinga in the temple is that it grows every year by a height equal to one grain of rice.

7.1.2.7 Shiv temple

Shiva Temple is the oldest temple in Pattan Bazar. People offer regular prayers and worship the lord Shiva. The temple has become very famous among people over a period of time.

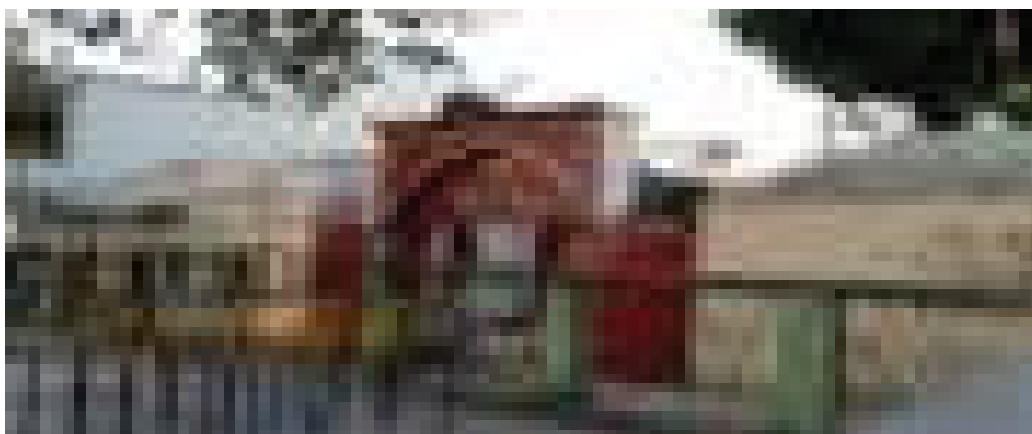


Figure 0-8: Shiv Temple in Nadaun

Source: Site Visit

7.1.2.8 Peer Sai Fazal Shah Saheb Grave

There is a mausoleum or shrine of a Sufi Saint Sai Fazal Shah located in Bharmoti Kalan village which is of religious importance and a prominent tourist destination. According to folklore, Sai Fazal Shah, a renowned saint in the region, became popular amongst the people. The grave was built by Sansar Chand, a king of the Katoch Dynasty, who was also amazed by the saint's power.



Figure 0-9: Peer Saheb Grave

Source: Field Survey

As per the Hindu calendar, in the last month of *Magh* or the 2nd week of February, a grant feast (*bhandara*) is organised in his honour. During this time, along with wrestling competition.

7.1.2.9 Inderpal Chowk

Nadaun was the home town of a great freedom fighter Shri Inder Pal. To commensurate his contribution in the freedom struggle, a statue of Shri Inder Pal has been installed at the junction of the New Bus stand. Also, the junction has been named after him, Inderpal Chowk.

7.2 Tourism

Nadaun is located very near to the Dhauladhar Regional Tourist circuit.

7.2.1 Regional Level

There are many famous and important tourist sites in the vicinity of Nadaun the planning area as well. They include Sujampur Tira, Deotsidh Temple, Jwalaji Temple, Mahakaleshwar Temple, Dera Baba Vadbhag Singh Gurudwara and others.

7.2.2 Planning Area Level

There are many of tourist sites located in and around Nadaun Planning Area (within 30km). Apart from the heritage structures mentioned above, the following are a few important tourist sites in Nadaun.

7.2.2.1 Atal Bihari Vajpayee Cricket Stadium

The Atal Bihari Vajpayee Cricket Stadium is one of the famous cricket stadiums in Himachal Pradesh which is located at the north-east edge of the Planning Area. It is one the important landmark of the Planning Area. Mostly State level cricket matches are organised in this stadium.

With the establishment of Atal Bihari Vajpayee Cricket Stadium, a lot of students, cricketers, sportsmen and visitors come to Nadaun to play, watch the cricket match or for training purposes. This has resulted in a boost of sports tourism and other support activities in the town.



Figure 0-10: Atal Bihari Vajpayee Cricket Stadium

Source: Field Survey

7.2.2.2 Jwalaji Temple

There are nine different flames within the temple. It is said that centuries ago, a person saw the flames for the first time and Raja Bhoomi Chandra, the ruler of the area had the original temple built. The Mughal Emperor Akbar installed a gold parasol and Maharaja Ranjit Singh had the dome gilded. Across the courtyard is Devi's bed chamber and above the temple is the shrine of Baba Gorakhnath. This is just 11 km from Nadaun town.

7.2.2.3 Chaumukha

Chaumukha is a famous temple of lord Shiva with a huge four faced image. The temple is located 11 km away from Nadaun town.

These are the places of interest in and around Nadaun town. The main issue is that these places do not attract tourists in the same quantum as other places of Himachal Pradesh do. Jwalaji receives the maximum number of tourists as it is one of the *shaktipeeths* and attracts thousands of pilgrims every year while the other places of attraction only receive the local tourists.

7.3 Tourism Infrastructure

There are no star category or luxury hotels in Nadaun. Presently, there are only three standard hotels in Nadaun with 30, 24 and 24, total 78 beds. Apart from this, there is also one PWD rest house located in the town. There are good number of restaurants and eating joints in and around the town also. As a small town with limited tourist arrivals, the number of hotels and restaurants are quite sufficient.

7.4 Tourist Forecast

Himachal Pradesh Tourism Development Corporation (HPTDC) should include Nadaun in the Dhauladhar Circuit. The circuit shall cover the entire Nadaun area along with nearby tourist destinations.

It is envisaged that Nadaun will be included in Dhauladhar circuit soon. Simultaneously, conservation and restoration of Nadaun fort is expected to be taken up on priority for implementation. Promotion of ABV stadium for sports at national level, will leverage further tourist activity at Nadaun.

7.4.1 Tourists Accommodation

Presently there are 78 beds in 3 hotels which caters the inflow of visitors who are coming for the ABV Cricket Stadium. Considering their will be a change in tourist inflow of about 300%, additional Hotels and hotel beds needs to be developed during the Plan period. The Table 0-1 shows the number of Hotels and Beds by the horizon year.

Table 0-1: Projected Distribution of Hotels and Beds

Type	Luxury	Star Category	Economy/ Budget
Hotel	2	3	5
No. of Beds	46	70	118

Source: Projected based on past trend

7.4.2 Tourism Strategies

The Recommendations for tourism development in the Planning area which has been incorporated in the Development Plan are as follows: —

- Preparation of Tourism Master Plan for the Planning area well integrated with existing tourist circuits in HP state by the Competent Authority.
- Development of other tourist circuits by the tourism department in co-ordination with the private sector.
- Development of Tourist Infrastructure in the Planning area.
- Promotion of Sustainable Tourism in the Planning area.

The proposed tourist circuits are as follows:

- Intra-Town (within)
- Inter-Town (between)

➤ Intra-Town

- Nadaun Fort
- ABV Cricket Stadium
- Gurudwara Shri Patshahi Dasvin
- Recreational spaces and Ghats on the bank of River Beas.
- River Rafting on Beas River
- Peer Sai Fazal Shah Saheb Grave
- Nadaun Bridge

➤ Inter-Town

- Dada Siba Temple
- Chaumukha Temple
- Jwalaji Temple
- Bajnath Temple
- Bir Monastery
- Murli Manohar Mandir
- Narvadeshwar Temple
- Tea Gardens and Factory
- Saurabh Van Vihar

- 10 Ambika Devi Temple
- 11 Sujanpur Tira
- 12 Deotsidh Temple
- 13 Kalanjari Devi
- 14 Jhanyari Devi Temple
- 15 Shahtalai
- 16 Bil-kaleshwar Temple
- 17 Chintpurni Temple

- An “Inter and intra” city Tourist Bus service will be proposed which will provide the bus service once/twice a week and later will increase the service according to the tourist demand/response.
- To increase the tourist footfall, a yearly or a half yearly local Nadaun fair is proposed to attract tourist to explore and enjoy the Nadaun culture and history. The fair may have the local flavour of Nadaun history, their art, culture, tradition, dance, music, etc.
- Art and Craft Village (Nadaun *Haat*) is proposed to be developed near the Fort area to promote employment opportunity for the people.
- River front development on the bank of river Beas is proposed to attract tourism both for the local and outside tourist, (as in the case of Rishikesh and other cities in India)
- Nature walk along the river front
- Water sport centre, having various adventure activities like River Rafting, Camping, Kayaking, Bungee jumping, Mountain Biking, etc., should be proposed so as to promote tourism sports in these area.
- Nadaun fort to be developed as a picnic spot for the people of Nadaun as well as some part of it will be converted into Museum.
- Some other areas of attraction are: -
 - View point on the hill top
 - Eco-tourism in DPF Tillu and DPF Kuthar

7.4.3 Infrastructure

The key strategies for boosting tourism sector in the Planning area have been summarized below-

1. Development of good quality transport and social infrastructure
2. Development of tourist amenities and services as per international standards. Development and maintenance of the tourist destinations
3. Allocation of funds for tourism development
4. Rehabilitation and sustainable development of tourism sites
5. Events and festivals leveraging cultural heritage in terms of religion, art and crafts and languages. Developing the handicraft and handloom *haats*
6. Encourage participation from government sectors, civil societies and local administration
7. Policy and regulatory support
8. Tourism awareness programs and workshops may be organized to enhance sensitization towards tourists and tourism destinations and for sustainable development and maintenance of tourism sites in the planning area
9. Basic amenities like clean public toilets, easily accessible telecommunication services, tourist information centres, banks and currency exchange centres, food courts and restaurants, hotels and lodges etc. among other services to be provided
10. Quality Hotels, recreation and shopping centres, local transportation, taxi services etc.

7.4.4 Sustainable Tourism

According to World Tourism Organization, **Sustainable Tourism** refers to **Environmental, Economic** and **Socio-Cultural** aspects of tourism development.

Eco-tourism is a form of sustainable tourism – all forms of tourism can become more sustainable but not all forms of tourism can be eco-tourism.

The principles of Sustainable Tourism are: -

- Tourism should be blended with local environment and community.
- Tourist experiences focuses on existing features.
- Local ownership.
- Local materials and food.
- Conservation of resources.



Figure 0-11: Principles of Sustainable Tourism

Source: www.sustainabletourisonline.com

8

Facilities and Services

8.1 Introduction

The existing social infrastructural facilities has been compared with the URDPFI 2015 Guidelines to identify the gaps and accordingly propose additional facilities in the Planning area. The existing infrastructure gap and the future requirements has been estimated, based on the projected population for 2035.

8.2 Educational Facilities

8.2.1 Pre-Primary Education

There are two government and three private pre-primary schools at rural areas of the planning area. The schools are located in Harmandir Mandiala, Jalari Saunkhlan, Kuthar, Tillu Pratham and Bela villages.

8.2.2 Primary Education

There are three government and one private primary schools in the Nagar Panchayat of Nadaun. In rural areas, there are five government primary schools situated at Harmandir Mandiala, Jalari Saunkhlan, Tillu Khas, Bela and DPF Tillu. There is one private primary school in Bela.

8.2.3 Middle School Education

There is one exclusive middle school in Harmandir Mandiala village. Other villages and urban areas have the senior secondary schools which serve as the middle school as well to the entire area.

8.2.4 Secondary School Education

There are three government and one private Higher Secondary schools in Nagar Panchayat area which serve as the secondary school in the area. In case of rural areas, two high schools serve as the secondary schools.

8.2.5 Higher Education

There is a Government Degree College just outside the Planning Area named Sidharth Government College. It offers course in Arts, Science, Commerce, Business Management and Computer Applications.

A part from this, there is one general private college in Nadaun Town named Vijay Vallabh College of Education which provides the Bachelor course in Arts, Science and Commerce subjects.

There is one institute on Pharmaceutical research in the Nadaun Town named Himachal Institute of Pharmaceutical Research. The institute provides bachelors in pharmaceutical sciences.



Figure 0-1: Himachal Institute of Pharmaceutical Research Institute, Nadaun
Source: Site Visit

8.2.6 Vocational Education

There is one ITI located at the Sujanpur road named Maa Jwala ITI. It serves a radius of 10-15km area. It provides courses for electrician and electronic mechanic. There is also a private polytechnic in Nadaun located in the campus of Vijay Vallabh College of Education.

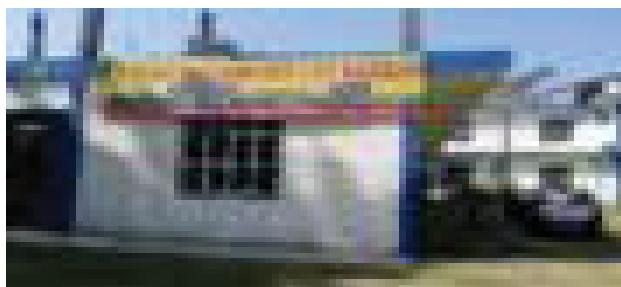


Figure 8-2: Vijay Vallabh Pvt. ITI, Nadaun
Source: Site Visit

8.2.7 Proposal

The Planning area has sufficient education facilities to cater the present need of the town. The additional requirement for future population are based on the URDPFI 2015 guidelines.

There is requirement for three Pre-Primary School and one Primary School in the Nagar Panchayat area as there are none presently. The higher educational facilities like Colleges and Professional Colleges are already well distributed in project area and adequate for the future population envisaged.

Table 8-1: Future demand for Educational Institutes

Name of Facilities	Existing No. of Facilities	Required No. of Facilities	Area (in Ha)
Pre-Primary School	5	2	0.2
Primary School	6	1	0.3
Senior Secondary School	5	-	0.0
College	1	-	0.0
Professional colleges	2	-	0.0
TOTAL			0.5

Source: Analysis and Estimation based on URDPFI Guidelines

8.3 Medical Facilities

There are three dispensaries in Nadaun Nagar Panchayat Area one each at Gagaal and Bela villages. As Nadaun is the Block and Tehsil head quarter of Nadaun Block and Nadaun Tehsil, it houses the Block Hospital in the town. There is one veterinary hospital in the planning area which serves the entire Nadaun Tehsil.

With the increase in population and growth of town, there is a great need to make available sufficient healthcare facilities to the inhabitants of the Planning area. The additional requirement for health facilities has been based on the URDPFI Guidelines.



Figure 8-3: Sub-Divisional Veterinary Hospital

Source: Site Visit

The existing and proposed health facilities has been listed below.

Table 8-2: Future demand for Healthcare Facilities

Name of Facilities	Existing No. of Facilities	Required No. of Facilities	Area (in Ha)
Dispensary	5	2	0.040
Family Welfare Centre	0	3	0.150
Nursing Home	0	1	0.075
Hospital	1	-	0.000
Veterinary Hospital	1	-	0.000
TOTAL			0.265

Source: Analysis and Estimation based on URDPFI Guidelines

One additional dispensary in Bela and Bharmoti Kalan and one nursing home is required in the entire planning area. Presently there are no Family Welfare Centers available in the Planning area and there is requirement of at least three centres. Considering the projected population and the regional Health Facilities, upgradation of existing Block Hospital is proposed. Presently, the hospital is 30 bedded which is proposed to be upgraded to 100 bedded Hospital.

8.4 Public Facilities

8.4.1 Postal Services

Nadaun Nagar Panchayat has a Sub-Divisional Post office. All the post offices and sub-post offices of Nadaun Tehsil come under it. Apart from these, post offices are also located at Jalari, DPF Tillu and Bela villages. The sub post offices are located at Bela and Tillu Pratham Villages.

Table 8-3 Future demand for postal services

Name of Facilities	Existing No. of Facilities	Required No. of Facilities	Area (in Ha)
Rural Post Office	3	-	0.00
Sub Post Office	2	4	0.20
Post Office	1	1	0.15
TOTAL			0.35

Source: Analysis and Estimation based on URDPFI Guidelines

There is a requirement of two Sub Post office in Bharmoti Kalan and Harmandir Mandiala. Post office at administrative office already exists in Nadaun town however, one more is proposed in Tillu Khas.

8.4.2 Telecommunication Services

The villages in the Panning area and the Nadaun Town is connected by the land line telephone network. The broad band connectivity is also there in the town and some of the villages have the internet connection as well but network connectivity is poor in rural areas. There is one telephone exchange in the Nadaun Nagar Panchayat which is enough to serve the projected population and Planning Area.

8.5. Police Services

There is one police station in Tillu Khas and two police booths in the Planning area. One booth is at the bus station and another one is near Jalari.

One additional police stations and 3-number of Police posts are required, which shall be distributed Nagar Panchayat Area, Bharmoti Kalan and Bela.

Table 8-4 Future requirement for security facilities

Name of Facilities	Existing No. of Facilities	Required No. of Facilities	Area (in Ha)
Police Post	2	3	0.30
Police Station	1	1	0.50
TOTAL			0.80

Source: Analysis and Estimation based on URDPFI Guidelines

8.5.1 Safety

8.5.2 Fire Services

There are no fire-fighting stations inside the planning area. The nearest fire-fighting station is located at Hamirpur town which is 28km from Nadaun. As per URDPFI Guidelines, one fire station is required to cater to 50,000 population.

If fire breaks out in the planning area there is no facility to tackle the situation immediately. The necessary help would take at least one hour to reach at the destination.

Thus, a Fire station is required in the Planning Area. Fire Station is proposed along the NH-3 in Nagarada village.

8.5.3 Disaster Management Centre

Disaster management cell should work under the Sub-Divisional Magistrate officer. Currently, no such Disaster management cell is operational in Nadaun Sub-division. The area falls under earth quake risk zone which depicts disaster can hit the area any time.

As per URDPFI Guidelines, one Disaster Management Centre is required to cater to 20,000 population within 5-10 km radius. Since, the Planning area is prone to natural hazards therefore one Disaster Management Centre has been proposed in Bharmoti Kalan with suitable open area for parking, temporary shelter etc.

8.6 Socio-Culture Facilities

In terms of socio-cultural facilities, only one banquet hall is existing in the Planning area. The availability of community facilities in the Planning area is not adequate. There is requirement of Banquet Hall and Community Welfare Centre.

Banquet hall and Community Welfare Center is proposed in Nagar Panchayat Area to cater to the need of projected population.



Figure 8-4: Community Hall

Source: Site Visit

Table 8-5 Future demand for other community facilities

Name of Facilities	Existing No. of Facilities	Required No. of Facilities	Area (Ha)
Banquet Hall	1	1	0.10
Community Welfare Center	0	1	0.15

Source: Analysis and Estimation based on URDPFI Guidelines

8.7 Support Facilities

8.7.1 Service Facilities

Distributive Facilities include Food grain Distribution Centre, Milk Booth, LPG Godown, Fuel Station and Petrol Pumps. Presently there are three Petrol Pumps in the planning area.

In terms of distribution services, the Planning area requires a LPG Godown /Gas Godown and two Milk booths to meet the demand of 2035 population. These need to be provided for while preparation of Sectoral Plans.

8.7.2 Cremation/ Burial Ground

As per URDPFI Guidelines, one Cremation Ground is required to cater to 10,000 populations within 5-10 km radius. The cremation grounds presently functioning in Kot is proposed to be retained. The cremation ground situated shall continue to function. One more Cremation shed is proposed, at the same location.

8.8 Sports and Recreation

The Planning area lacks in organised green spaces. The present land allocation for the recreational facilities is very low in comparison to the growth of the Planning area. Existing open spaces are generally scattered and are not interconnected.

8.8.1 Recreational Spaces

There are no designated neighbourhood parks in Nadaun and its surroundings. There is a need to provide for existing as well as for proposed population.

There is only one public park in the entire planning area near Shiv Temple. There is a great need to provide more gardens, parks, and playgrounds in the area for citizens.

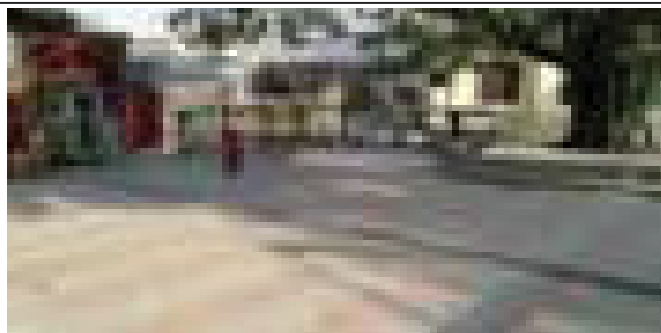


Figure 8-5: Existing Park in Nadaun Planning Area

Source: Site Visit

Table 8-6 Future demand for recreational facilities

Name of Facilities	Existing No. of Facilities	Required No. of Facilities	Area (Ha)
Housing Area Park	1	3	3.00
Neighbourhood Park	0	2	4.00
City Parks/ playgrounds/ <i>maidan</i> / exhibition grounds/ cultural gathering grounds	2	-	0.00
Botanical Garden	0	1	10.0
Recreational complex including zoo	0	1	10.0
Total			27.00

Source: Analysis and Estimation based on URDPFI Guidelines

8.8.2 Neighborhood Level Recreational Spaces

There is one playground near the bus stand known as Kharidi Ground and one *maidan* next to SDO office in ward no. 2 where various cultural events like *Ramlila* and sometimes political/ election rallies are held. Other than this there are no town level open spaces available in Nadaun Planning Area. There is a need of the same.



Figure 8-6: Ramlila Maidan

Source: Site Visit

Additional three Housing Area Parks are required, one in sector. Two neighbourhood parks are proposed in Nagar one in Panchayat Area and the other one in Bharmoti Kalan village respectively. Also, Botanical Garden and Recreational Complex Including Zoo is proposed in Tillu Khas

8.8.3 Sports Facilities

There is one cricket stadium in Nadaun where many of the national and state level matches are held. This is an important landmark of Nadaun town.

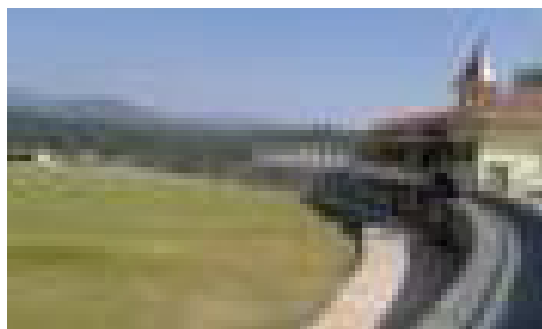


Figure 8-7: Atal Bihari Vajpayee Stadium in Bela

Source: Site Visit

As per the URDPFI guidelines four residential play area are required to serve the envisaged population. The play area will be distributed in each sector. Also, a neighborhood play area is proposed in Nagarada village in Nadaun NP.

Table 8-7 Future demand for sports facilities

Name of Facilities	Existing No. of Facilities	Required No. of Facilities	Area (Ha)
Residential unit play area	0	4	2.0
Neighbourhood Play area	0	1	1.0

Source: Analysis and Estimation based on URDPFI Guidelines

8.9 Green Belt

Nadaun town has large eco-sensitive areas like natural drains and river which needs to be preserved. The proposal provides for green buffer as Green Belt along the water bodies. A buffer of 25 m along Beas River is proposed and also, development of 2 m green buffer around the natural drains is proposed to conserve the natural drainage in the planning area.

9.1 Water Supply

9.1.1 Existing Situation

Nadaun Planning Area utilizes both surface water and groundwater to cater to its domestic as well as agricultural demand for water supply use. Surface water is the major source of water supply for

the planning area. Water is being supplied to Nadaun Planning Area from Beas River through a Lift well Water Supply Scheme (LWSS) by the Irrigation and Public Health (IPH) Department. Apart from the water supply by IPH, water supply need is also met through individual/ community bore well and hand pumps.

9.1.1.1 Existing Water Supply Schemes

There are three water supply schemes operational in Nadaun Planning Area. All the three schemes are Lift Water Supply Schemes. One water supply scheme supplies water to the Nagar Panchayat area while the other two supply water to the Gram Panchayat area.

Under the LWSS Nadaun Scheme (1989-90), a Water Treatment Plant of capacity 0.78 MLD had been constructed at Kunah Khad but due to multifarious construction activities in the vicinity of the intake well, the turbidity of river Beas has reached 10,000 ppm during summer and monsoon season and is beyond treatment parameter. Thus, a new Lift Water Supply Scheme has been proposed by IPH Department at Village Kaloor by tapping the underground water through tube wells.

9.1.2 Demand Estimation

CPHEEO Manual norms for Water Supply have been adopted for calculating water demand for base year, intermediate year and target year.

It is proposed that rate of water supply should be increased to 135 lpcd for residential purposes and for other purposes, consumption rate as mentioned in CPHEEO Manual.

As per URDPFI guidelines, the water required for firefighting purpose demand on total residential water demand is 1 – 2 % of total water demand. The transmission and distribution losses are assumed to be 15 % of the total water demand.

Based on this framework the estimated water demand for various activities in the Planning area is given below

Table 9-1: Water Demand and Gap

Description	Year		
	2016	2026	2035
Proposed Population	11106	13941	17501
for Domestic @135 lpcd (MLD)	1.50	1.88	2.36
Commercial Demand (MLD)	0.11	0.13	0.17
Industrial Demand (MLD)	0.09	0.11	0.14
Institutional Demand (MLD)	0.04	0.05	0.06
Floating Demand (MLD)	0.12	0.15	0.19
2% Fire Fighting (MLD)	0.04	0.05	0.06
Total Water Demand (MLD)	1.89	2.37	2.98
15% losses (NRW) (MLD)	0.28	0.36	0.45
Grand Total of Water Demand (MLD)	2.17	2.73	3.42
Existing Supply (MLD)	0.78	0.78	0.78
Gap (MLD)	1.39	1.95	2.64

Source: Estimated based on CPHEEO Manual for Water Supply

The total water demand for base year 2016, intermediate year 2026 and target year 2035 is 2.17 MLD, 2.73 MLD and 3.42 MLD respectively. At present, water is supply does not take into

account the floating population and firefighting load. Hence to bridge the supply gap, water supply system need to be augmented to meet the water demand at different stages.

9.1.3 Water Sources and Treatment:

The existing water sources can be used to meet the water demand for the Planning area. Presently, the existing water treatment plant is required to be augmented as per demand estimation.

Table 9-2: Water Treatment Demand

Description	Year		
	2016	2026	2035
Total Water Demand (MLD)	2.17	2.73	3.42
WTP Capacity Required (MLD)	2.49	3.12	3.92
Existing WTP Capacity (MLD)	0.78	0.78	0.78
Augmentation required (MLD)	1.71	2.34	3.14

Source: Estimated based on CPHEEO Manual for Water Supply

9.1.4 Service Level Benchmarking

Service level benchmarking have been formulated by the Ministry of Urban Development (MoUD) with a view to achieving all-round sustainability including environmental sustainability.

9.1.5 Key Issues & challenges

- The existing water supply system for the study area is not sufficient to cater even the existing water demand of the area
- Intermittent water supply system
- Water losses
- Consumers lack awareness for consumption of water

9.1.6 Development Strategies

The present water supply system in project area is intermittent, this is proposed to be developed into 24x7 water supply system. Decentralization in the distribution system ensures equalization of supply of water throughout the area. Each decentralized area should have its separate distribution network served by the elevated and/or ground level service reservoirs. The service reservoirs should be provided at the highest elevation of the distribution zone, so that the water can be distributed by gravity for majority of the supply area.

Table 9-3: Service Level Benchmarking for Water Supply System (2016-2035)

Sl. No.	Services	Ultimate Benchmark as per MoUD, GoI Guidelines	Present Status (%)	Aim to be achieved in Long Term
1	Coverage of Water Supply connections	100%	90%	100%
2	Per Capita Supply of Water in Project area	135 lpcd	70 lpcd	135 lpcd
3	Extent of Non-revenue Water	15%	NA	15%
4	Extent of Metering	100%	NA	100%
5	Continuity of Water supplied	24 Hours	NA	24 Hours
6	Efficiency in redressal of customer complaints	80%	NA	80%
7	Quality of Water Supplied	100%	NA	100%
8	Cost Recovery	100%	NA	100%
9	Efficiency in collection of Water charges	90%	NA	90%

Source: Based on NMSH, MoUD, GoI, 2014

Present capacity of storage reservoir at entire Planning area is 1.87ML. The required storage capacity of service reservoirs 0.95 ML per day for the vision year based on 24x7 water supply system. So, existing service reservoirs can be used to supply water to end users, depending upon the physical condition.

9.1.7 Fire stations and other fire-fighting facilities

Generally, firefighting network are designed for minimum 50 psi at each node in the system. This type of network would need to be designed independently or the combined water supply network for town.

The population size and given extent, it is not economically viable to design a firefighting network independently or combined, that is fully capable of meeting firefighting requirements.

As a result, it is recommended that the fire-fighting services will be catered through a fire station. Presently, there is no fire stations inside the planning area. The nearest fire station is located at Hamirpur town which is 28km far from Nadaun. According to the standards set by URDPFI, one fire sub-station has to be located within 3-4 km radius with essential residential accommodation which would serve at least 50,000 people. Thus, a new fire station is proposed along NH-3 in Nagarada village.

The fire station will have dedicated water reservoir with adequate capacity within its premises which will be supplied from nearest service reservoir. Fire hydrants on the periphery exclusively for fire-fighting services should be considered in residential/ commercial/ industrial zones. Necessary provisions for laying underground/ over ground fire-fighting measures, water lines, hydrants etc. may be kept. The concerned agencies shall take approval from Fire Department for fire-fighting measures while laying the services for an area.

As per information received from IPH, Nadaun, one UGR of capacity 10,000 ltr. is proposed for dedicatedly fire-fighting purpose.

9.1.8 Water Tariff

There is differential water pricing in Nadaun Planning Area. Water tariff for domestic connection in Nadaun urban area is Rs. 107/- per month while the same in rural areas is Rs. 28/- per month. From April'2016 onwards, the water tariff in urban area has been revised. Domestic tariff is Rs. 11.40/KL and Commercial connection also follows the differential pricing system with Rs. 22.40 per 1000 litres in urban areas and Rs. 50/- per month in rural area of planning area.

9.1.9 Proposal and Recommendations

1. Development strategies for improvement and utilization of existing water supply schemes for the potential demands and adequate supply of potable water in the region.
2. Detailed analysis of existing water sources and supply system
3. Detailed designing of water supply system (DPR)
4. Water supply shall be on 24x7 for equity, effective metering and for best hygiene model of supply. Leakage detection and thefts can easily be revealed only with a 24x7 supply pattern.
5. Augmentation of Water Treatment Plant or setup new water treatment plant of 2.40 MLD by 2026 and additional 1.00 MLD capacity of water treatment plant after 2026 at Bella villages
6. 100% coverage of treated piped water supply to all users
7. Replacement or Repair the old/defunct system/network, if any
8. Streamlining of household connections as well as legalized connections

9. Implementation of 100% Consumer metering system
10. Awareness program for optimization of water use, recycling and recharging
11. Introducing SCADA system to minimise water losses and theft
12. Setting up a new Fire Station inside the planning area
13. Complaint redressal centers to be set up to look after the issues on water supply
14. Systems should function with minimum interruption and failures.
15. Use of Recycled water for meeting horticulture, air-conditioning, industrial cooling and other non-potable uses
16. Implementation of Rain Water Harvesting Scheme.
17. Detailed Operation and Maintenance Programme.

9.2 Sewerage System

9.2.1 Existing Situation and Demand Estimation

At present, Nadaun Planning Area does not have any sewage network. The planning area being situated in a plain to hilly terrain utilise individual septic tanks for sewage disposal.

Taking 80% of total water supply and 10% infiltration as per CPHEEO Manual on Sewage and Sewage Treatment, Clause 3.6, future sewage generation projected is as follows:

9.2.2 Proposal for Development

An efficient sewerage and wastewater disposal system is of critical importance with respect to maintaining high standards of health and hygiene in the Planning area. The sewerage system proposed for planning area aims at the provision of such a facility in a cost effective and organized manner, by establishing a hierarchical distribution of sewer networks in the urban landscape. The aim here is to regulate the diameter of the sewerage pipes, which is the costliest entity of the system, by establishing a distinct hierarchy in the collection system catering to its optimal needs.

Taking 80% of total water supply and 10% infiltration as per CPHEEO Manual, future sewage generation projected is as follows:

Table 9-4: Sewerage Generation and Gap

Description	Year		
	2016	2026	2035
Sewage Generation (MLD)	1.71	2.14	2.69
Total Sewage Generation including infiltration (MLD)	1.88	2.36	2.96
STP Capacity (MLD)	1.97	2.48	3.11
Existing STP Capacity (MLD)	1.50	1.50	1.50
Augmentation required (MLD)	0.47	0.98	1.61

Source : Calculated as per CPHEEO Manual

* Proposed 1.50 MLD STP is under construction

9.2.2.1 Sewage Treatment and Disposal

Currently, the planning area generates 1.97 MLD of sewage. Projected sewage generation for 2035 will be 3.11 MLD. Currently, there is no facility for centralised/decentralized collection, treatment and disposal of the sewage generated operational in Nadaun. However, a 1.50 MLD STP with sewer network in Nagar Panchayat area is being constructed at the lowest level in the Nallah between Dolee Gharan and Nagarada.

9.2.3 Service Level Benchmarking

The service level benchmarks of Sewerage and Sanitation of the planning area has been presented in the following.

9.2.4 Key Issues & challenges

- Wide practice of septic tank in the planning area
- Open defecation
- Discharge of domestic sewage, rotten food materials and vegetation causing bacteriological contamination of water

Table 9-5: Service Level Benchmarking for Sewerage and Sanitation (2016-2035)

Sl. No.	Services	Ultimate Benchmark as per MoUD, GoI Guidelines (%)	Present Status (%)	Aim to be achieved in Long Term
1	Coverage of Toilets	100	92	100
2	Coverage of Sewerage Network Services	100	10	100
3	Collection Efficiency of Sewerage Network	100	0	100
4	Adequacy of Sewage Treatment capacity	100	0	100
5	Quality of Sewage Treatment	100	0	100
6	Extent of reuse and recycling of sewage	20	0	20
7	Efficiency in redressal of customer complaints	80	0	80
8	Extent of cost recovery in sewage management	100	0	100
9	Efficiency in collection of sewerage charges	90	0	90

Source : Based on NMSH, MoUD, GoI, 2014 and Data Collected

9.2.5 Proposals and Recommendations

1. As per the gap and deficiency identified in the existing sewerage system of the study area, an integrated approach is required to cater the sustainable solution.
2. The project area needs to develop a proper integrated centralized/decentralized sewage collection and treatment method. A new Sewerage network and 1.50 MLD STP is under construction, but that need to be augmented to cater the sewerage generate from planning area.
3. Detailed designing of sewerage system (DPR). Provision of an efficient sewerage system throughout the study area needs to be put in place which can be ensured by
 - Laying sewerage network lines
 - Sewage treatment needs to be carried out before disposal
 - To ensure hygienic condition and environmental sanitation

- The storm water drainage system of the planning area should be segregated from the sewerage network.
- 4. All the household/community septic tanks should be connected to the sewer network.
- 5. Implementation of Centralized/ decentralized collection, treatment and disposal of the sewage generated.
- 6. Construction of adequate public toilets complex at public places.
- 7. Possibilities of recycle/reuse of waste water shall be incorporated in the development plan to reduce the burden on water supply system.
- 8. Reuse options for Treated Wastewater
The outlet water quality parameters after treatment should be in accordance with IS: 10500. Possibilities of reuse of waste water shall needs to be incorporated in the detailed masterplan on sewerage system to reduce the burden on water supply system. Treated water from STP should be recycled as per URDPFI Guidelines and sludge can be used as manure for agriculture and plantation. It should be aimed to achieve 100% coverage of sewerage connections to every household.
- 9. Detailed Operation and Maintenance Programme

9.3 Storm Water Drainage Network

9.3.1 Existing Situation and Demand Estimation

Topography and natural drainage pattern of the area is from south-east to north-west, north and north-east. Nadaun Planning Area has two natural water channels namely Beas River on the northern and north-eastern side and Man Khad on the north-western side. Beas River flows from north-east to north-west and Man Khad flows from north to south. The surface run off is mostly toward north and north-west to south. The planning area is not vulnerable to floods.

In addition, there are number of Nalags which have their outfall into these natural water channels. These small water channels discharge runoff from the surrounding areas. Most of the drains are in poor condition which requires de-silting, channelization and lining. The discharge from the Nalags flows into the Beas and Man Khad River as four places on the north-west bank of the river/khad within the Nadaun town.

Nadaun Planning Area has a present road length of 43.32 km while *pucca* storm water drains are existing for a length of 29.7 km and the remaining that is 14.85 kms of road length have *kuccha* or no drains.

As per CPHEEO Manual on Sewage and sewage treatment, Clause 3.9 and its sub-clauses, Rainfall intensity calculated from monthly rainfall data of last 11 years comes out to be 81.70 mm/hr. considering once in 5 years as storm frequency and 30 minutes as Time of concentration. Rational method was used for computation of run-off, which is recommended for urban areas by CPHEEO– Drainage Design Manual.

Figure 9-1: Intensity-Duration Curve*Source: Calculated based on CPHEEO Manual*

The planning area is broadly divided into 16 catchments, which is further divided into smaller sub-catchments. All the major Catchments draining itself to major streams/water bodies. Key feature of the network is use of natural streams, to minimize the drain section. Several outfalls are proposed in order to enable safe conveyance of runoff discharge. Two major streams flowing through the project area receives run off through major catchment basin. The total runoff generated for entire study is 132.41 cumecs.

9.3.2 Key Issues & challenges

The existing system suffers with the following deficiencies:

- Unplanned storm water drainage system
- Most of the drains are open
- In absence of regular solid waste collection, wastes dumped into the drains, which leads to choking and overflowing of drains.
- The width of the existing drains is further narrowed because of encroachment, causing obstructions to the free flow of storm water.
- Systematic and integrated drainage plan for the study area is not in place.
- The natural storm water is mixed with household/human waste which creates environmental pollution and public health concerns.
- The city has poor capacity for effective periodic maintenance of the drains in terms of cleaning and de-silting.

9.3.3 Development Strategies

As an integrated approach, some of the drains will run alongside of the roads (Roadside Drains) and others may follow natural slope (Cross Drain). The drains will run along the roads, either one side or both side as per road camber. All the primary and secondary drains should be covered. Wherever road of width is greater than 10 m, kerb opening inlets are proposed at every 50 m interval to provide horizontal entry into the drain. And wherever the road width is less than 10 m Perforated Cover Slabs are proposed at every 50 m interval.

9.3.3.1 Rainwater Harvesting

Long term water level declines as a result of careless exploitation of groundwater resource has led to several problems. Some of these problems are reduced well yields, low water level and leakage into the aquifer of highly mineralised water. In order to over-come these serious environmental implications, the recharge potential of groundwater resource has to be given utmost importance.

Rain water harvesting is the technique of collection and storage of rain water at surface or in sub-surface aquifers, before it is lost as surface run-off.

9.3.4 Proposed Projects

Based on the existing system and gap analysis, there are some potential projects that can be proposed.

1. Detailed Master Plan for Storm Water Drainage system for further detailed assessment and solution of drainage proposal Storm water Drainage (SWD) system should designed as a separate system to carry storm water by gravity for the entire project area. Storm water drains are designed with a certain gradient, which will create a self-cleansing velocity, as these drains will carry storm water along with grit, silt and other impurities. All the primary storm water drains should be designed to have a capacity to carry the total discharge of all secondary and tertiary storm water drains.
2. Detailed Hydrology study of existing *nallahs*/ canals/ river for proper flood management plan and to improve efficiency to cater for storm water drains from collection to outfalls.
3. Detailed designing of storm water system (DPR)
4. Proper outfall structures
5. Existing *nallahs* running through the study area should be improved to increase the efficiency of natural channels. Improvement works shall consist of desilting of channel, development of banks, improvement of side slopes and development of green belt around the *nallahs* and provision of culverts at road crossings.
6. It is very important for all upcoming new developments to have rain water harvesting measures. Even government can improve the urban environment by providing recharge wells at suitable locations.
7. Regular and proper operation and maintenance of drainage facility is essential to function. It is also accepted that for quality maintenance of drainage system, optimum use of labour, equipment and material is required to keep the system in good condition, so that storm water is efficiently conveyed up to disposal point.
8. Rainwater harvesting system
9. Detailed Operation and Maintenance Programme

9.4 Solid Waste Management

9.4.1 Existing Situation and Demand Estimation

Nadaun Nagar Panchayat looks after the collection and transportation of solid waste in Nadaun Town. Out of the 7 wards of Nadaun town, there is 100% door-to-door solid waste collection from Ward nos. 2 to 5 and 80% collection from Ward nos. 1 and 6 while there is only partial collection of solid waste from Wards no. 7. The primary door-to-door-collection of solid waste takes place manually through 4 wheel barrows. The areas which are not served by door-to-door collection,

community bins have been provided by the Nagar Panchayat. There are 7 dumper community bins of size 4' x 6' x 5' and two small dust bins of size 1' x 1' within the urban area. Loading and unloading is done manually and waste is transported through a tractor owned by the Nagar Panchayat. There is no door-to-door collection of solid waste in the rural areas of the planning area.

As per the Nadaun Nagar Panchayat, 8 to 9 quintals i.e., 0.8 to 0.9 MT of solid waste is generated in Nadaun town per day for people in Nadaun town.

The collected waste in Nadaun Nagar Panchayat area is currently dumped at a solid waste dumping site on the banks of Man Khad in Nagarada Village. A landfill site has also been proposed by the Nadaun Nagar Panchayat in the close vicinity of the Dumping Site.

9.4.1.1 Projected SWM Generation and Gap Assessment

The number of waste generating inhabitants as well as collection is assumed to rise to a higher percentage of the total population. With passing time as a consequence of ameliorated collection systems the percentages are due to rise in coverage from 0 in 2016 to 100 in 2035 which leads to increase in daily waste production.

The following table gives estimated solid waste generated in the planning area at the end of the plan period (2035) and the estimated waste reaching the land fill site.

The following assumptions were considered:

- Waste generated per day: 0.25 kg per capita per day.
- Solid waste growth factor: 1.33 percent per annum (ministry of urban development standard).
- Quantity of solid waste reaching landfill: 39 percent of total waste (based on national average).

Table 9-6: Solid Waste Generation and Gap

Sl. No.	Description	2016	2026	2035
1	Population	11106	13941	17501
2	Solid Waste Generation Annual (tons/day)	2.43	3.48	4.99
3	Annual Cumulative Solid Waste Generation (tons/day)	2.43	8.82	17.98
4	Existing Treatment Facility (tons/day)	0.90	0.90	0.90
5	Gap (tons/day)	1.53	2.58	4.09

Source : Calculated as per CPHEEO Manual and MoUD Standard

9.4.2 Service Level Benchmarking

Table 9-7: Service Level Benchmarking for Solid Waste Management (2016-2035)

Sl. No.	Services	Ultimate Benchmark as per MoUD, GoI Guidelines (%)	Present Status (%)
1	Household level coverage of SWM services through door-to-door collection of waste	100	10

Sl. No.	Services	Ultimate Benchmark as per MoUD, GoI Guidelines (%)	Present Status (%)
2	Collection Efficiency of Solid waste	100	NA
3	Extent of segregation of waste	100	NA
4	Extent of MSW Recovered	80	NA
5	Extent of scientific disposal of waste of landfill sites	100	NA
6	Efficiency in redressal of customer complaints	80	NA
7	Extent of cost recovery for ULB/ NP/ Authorized agency in SWM services	100	NA
8	Efficiency in collection of SWM charges	90	NA

Source : Projections based on NMSH, MoUD, GoI, 2014

9.4.3 Issues and Concerns

The analysis of existing solid waste management practices of study area indicates that the city has no structured primary and secondary collection, disposal arrangements. Integrated solid waste management for study area requires the use of various instruments for improved service delivery.

Collection and storage of waste is an important issue which has great impact on the overall solid waste management system.

Awareness levels in terms of importance of solid waste management has a huge scope for improvement. Installation of community bins and regular collection and transportation of roadside wastes to the identified dumping site need to be done.

Segregation of waste needs to be done before transfer to landfill site.

The range of issues that needs to be addressed are listed below.

- Effective public participation in segregation of recyclable waste and storage of waste at source.
- Effectiveness of awareness building or direct community involvement.
- User Charges.
- Waste Minimization and Recycling.
- Integrated Waste Treatment.
- Regional Sanitary Landfill Facility.
- Institutional strengthening and human resources development.

9.4.3.1 Private Sector Participation in SWM at Urban Local Body Level

Given the lack of in-house capability of municipal authorities and paucity of financial resources, it is desirable to outsource certain services and resort to private sector/NGO participation in providing SWM services.

Experience the world over has shown that private sector participation (PSP) results in cost savings and improvement in efficiency and effectiveness in service delivery mainly due to financial and managerial autonomy and accountability in private sector operations. Besides, it brings in new investment and better technologies. In developed countries the private sector manages most of the SWM services.

In India, by and large, municipal authorities are providing solid waste management services departmentally. Resistance from labour unions and interpretations of labour laws have discouraged city administrations from contracting out services to private operators. Of late, some experiments to privatize certain SWM services have demonstrated improvement in the level of services in a cost-effective manner.

It is proposed that an integrated Solid Waste Management System as being developed for Sundernagar cluster, Mandi be developed for Nadaun and surrounding areas.

9.4.4 Proposed Solid Waste Management Projects

For achieving the goal and implementing the strategies various projects need to be undertaken. Some of the proposed projects are-

- An integrated cluster based solid waste management to be developed for Nadaun and surrounding towns and villages.
- 100% door to door waste collection.
- Waste transfer stations which will include the following:
 - a) Decentralized compost plants
 - b) Sorting and recycling yards
- Proper Waste collection and transportation.
- Segregation of biodegradable and non-biodegradable at source
- Resource recovery through sorting and recycling of materials.
- Resource recovery through waste processing by using composting or waste to energy approaches.
- Waste minimization by reducing volume, toxicity or other physical/chemical properties of waste to make it safe for final disposal.
- Disposal of waste in an environmentally safe and sustainable manner through land filling.
- Recycling of Solid waste
- Commissioning of landfilling site.
- Integrated management of Solid waste.
- Awareness generation for reduce, reuse and recycling of Solid waste
- Waste treatment facility Sanitary landfill.
- Incineration for treatment of biomedical waste
- Information Communication Education (ICE) for solid waste management.

9.5 Electrical Network

9.5.1 Existing Situation

Power is supplied in Nadaun Planning Area by the Himachal Pradesh State Electricity Board Limited (HPSEBL). Hydroelectricity is the main source of power supply for HPSEB as well as HPSEB exports power through major transmission lines to various parts in India.

The power supply of Nadaun town is being managed from 2X16/20MVA, 132/33kV DEHR substation which is 22.7km (ckM) and from 2X25/31.5MVA, 132/33kV Hamirpur – I Substation which is 19.4km (ckM) away from Nadaun. The other available power source is Hamirpur-II (Mattan Sindh) with 3x80/100 MVA, 220/132 kV.

Based on the information collected during site visits, it is found that four no's. 11kV Feeder, emanating from Gagaal 33/11kV Substation feeding the Nadaun Town area. The details of existing power infrastructures are as presented in Table 9-8

9.5.2 Power Demand Forecast

Load demand/forecast is the first stage in planning any power system. It serves as an input for the most critical areas of the power system planning namely, generation, transmission, and distribution planning and tariff setting. The aim of load forecast study is to provide a comparative between the projected Peak Demand Load and projected Energy Consumption for the next 20 years. This load forecasting study will help to propose generation, transmission and distribution expansion programs on the basis of economic activities and population growth at Nadaun Town

After analysing the data, it is found that the key factors which can affect the load forecast for the Nadaun town for the next twenty years are as follows:

- Estimation of suppressed demand
- High level of unmetered sale
- High transmission and distribution losses

Table 9-8: Details of existing power infrastructure

Particular	Unit		Details	
A. Basic Information				
Total Number of Consumers	No.		2143	
Total Population (as per 2011 census)	No.		9912	
B. Asset Information				
Total Number of 33/11 kV Sub-stations feeding the Project Area	Numbers		1	
Number and capacity of Power Transformers	Numbers/MVA		*Not Available	
Total Number 11 kV Feeders feeding the Project Area	Numbers		4	
Total Length of 11 kV Feeders	kM		*Not Available	
Total Number of Distribution Transformers	Numbers		18	
Total Capacity of Distribution Transformers	MVA		2	
C. Commercial Information	Unit	FY (2013-14)	FY (2014-15)	FY (2015-16)
Particulars				
Energy Input	kWH	18438687	20717767	20948734
Metered Energy Sales	kWH	15070729	16573398	17342013
Assessed Energy	kWH	16694382	17331496	17772591
Total Energy Billed	kWH	15713051	18094294	19387313
Revenue Billed	Rs. lac	86591871	87581543	113951420
Revenue collected	Rs. lac	78186824	84306415	92519284
Billing Efficiency	%	85%	87%	92%
Collection Efficiency	%	90%	96%	81%
AT&C Losses	%	23.05%	15.93%	24.97%

Source: HPSEB

DETAILS OF EXISTING LOAD DISTRIBUTION AND DISTRIBUTION TRANSFORMERS (FEEDER WISE)																		
SUBS TATI ON NAM E	33/11kV Gagaul SS																	
FEED ER NAM	11kV Feeders (Nadaun, Kolah-Sera, Bhumpal, Majheen)																	
DT No.	Location of DT	Rating of DT	Max Demand	T otal N os - of con sum er	Domestic Load (Authorized)			Commercial Load (Authorized)			NDNC		Others Load		Max Demand	Addi tional De ma nd due to Lo ad Growth for 5yrs	Antic ipate d Max. Dem and at the end of horiz on year	Remarks
					1- Ph		Total	1- Ph		Total								
					No.	kW	kW	No.	kW	kW	No.	kW	No.	kW	kW	kV A	kVA	
A	Nadaun Feeder																	
1	Nagarada (NP)	100	181	130	100	100	100	29	58	58	1	5		0	163	36	217	Feeder wise consumer details data need to be rechecked
2	Dolee Ghara n (NP) - VTH	250	372	251	176	176	176	70	140	140	3	15	2	4	335	74	447	
3	Seri (NP) - Nadaun	250	1014	713	531	531	531	175	350	350	6	30	1	2	913	203	1217	
4	Kuthara - Kuthara I	25	81	69	65	65	65	4	8	8		0		0	73	16	97	
5	DPF Kuthara - Kuthara II	25	108	76	55	55	55	21	42	42		0		0	97	22	129	
6	Bela	100	59	39	25	25	25	14	28	28		0		0	53	12	71	
B	Kolah-Sera Feeder																	
1	Bharmoti Kalan - Bharmoti I	250	78	62	54	54	54	8	16	16		0		0	70	16	93	
2	Bharmoti Kalan - Bharmoti II	25	47	36	30	30	30	6	12	12		0		0	42	9	56	
3	Bharmoti Kalan - Mangal I	63	27	22	20	20	20	2	4	4		0		0	24	5	32	
4	KOT (NP)	100	241	209	201	201	201	8	16	16		0		0	217	48	289	Overloaded
C	Bhumpal Feeder																	
1	Jalari-Saunkhlan - Jalari I	100	150	135	135	135	135	0	0	0		0		0	135	30	180	Overloaded
2	Harmadiri Mandi ala - Jalari III	63	26	15	7	7	7	8	16	16		0		0	23	5	31	
3	Harmadiri Rakwala - Jalari II	100	163	120	93	93	93	27	54	54		0		0	147	33	196	Overloaded
4	Gagaul - Jalari IV	63	97	77	70	70	70	6	12	12	1	5		0	87	19	116	Overloaded
5	Gagaul - Degree College	100	66	53	50	50	50	2	4	4	1	5		0	59	13	79	
D	Majheen Feeder																	
1	Tillu DPF - Tillu	250	77	66	63	63	63	3	6	6		0		0	69	15	92	
2	Tillu Khas - Tillu I	25	8	7	7	7	7		0	0		0		0	7	2	9	
3	Tillu Pratham - Tillu II	63	70	63	63	63	63		0	0		0		0	63	14	84	
		1952	2863	21443	1745	1745	1745	383	766	766	12	60	3	6	2577	573	3436	

In this study, the settlements have been categorized based on population and urbanization level. The per-capita or per-household electricity consumption will vary from one type to another depending on the population growth and the expected future development in each type.

9.5.3 Key Assumptions in Demand Forecasting

- Growth Rate of Energy Input as 4.35%-
- Growth rate of Energy Sale as 7.26%

9.5.4 Expansion Proposal:

Based upon the cumulative power usages and growth rate above, the projected load forecasting of the Nadaun town over the next 20 years is given below table.

Years	2016 -2021	2021 - 2026	2026 - 2031	2031 - 2035
Power Demand (MW)	3.42	4.5	6	7.98

The estimated power requirement of Nadaun Town till 2035 is 7.98MW. To meet the additional power requirement till 2035, the addition or augmentation of existing 33/11kV Gagaal Substation shall be required and addition of new primary and secondary substation with addition/ upgradation of subsequent distribution networks.

9.5.5 Planning Criteria

The power infrastructure development of Nadaun Town is proposed with HVDS system by extension of 11kV Network and potential reduction in Low Voltage Network. For implementation of HVDS system, new 11kv feeder will be created including augmentation and bifurcation of existing 11kV feeders to improve the quality of power supply and Reduction in distribution losses. All the consumers are to be feed through energy meters which is RS 485 enabled, with a futuristic view for implementation of SCADA.

The planning has been optimized to minimize the overall cost. This optimization considers the numbers of circuits requirement, it's capacity of distribution and also the location, timing and additional capacity of the proposed network during operation. The optimization includes an assessment of cost for OH distribution network considering the impact of projected load growth.

The following critical areas also need to be attended for improve the energy efficiency.

- i Introduction of energy audits and design of energy efficient buildings and network
- ii AT&C losses reduction
- iii Load management techniques and energy accounting
- iv Promotion of new and renewable sources of energy, and reduce demand of conventional power.
- v Replacement of low efficiency incandescent lamp with LED.

9.5.6 Street Lighting

Roads of the development area shall generally cater to-

- i. Movement of goods, persons through vehicles including cyclist/pedestrian.
- ii. Basic requirement of road, green area and periphery lighting proposed be as follows:
- iii. Adequate level of illuminations for vehicles/cyclist
- iv. Uniform illumination level over carriage way with minimum glare
- v. Safety of movement
- vi. Minimum disturbance during fog/dust conditions
- vii. Use of high efficiency lighting fixtures with high lumen output and low power consumption
- viii. Beautification and pleasing view
- ix. The Street lighting should be provided with LED luminaries on decorative street lighting poles.

Table 9-9: Technical Details of Road Lighting System

S.NO.	DESCRIPTION	Upto 18 M WIDE ROAD (Primary Road)	3.5M WIDE ROAD (Secondary Road)
1	Area of Installation	Mixed, Residential	Mixed, Residential
2	Pole Mounting detail	Single arm pole on single side of the road.	Single arm pole on single side of the road.
3	Lighting Fixture	1 x 72W, LED Light	1 x 40W, LED Light
4	Mounting height	8Mtrs.	4Mtrs.
5	Spacing	25M	30M

9.5.7 Proposals and Recommendations

1. Flood light to be installed at major junctions within the town viz., Inderpal Chowk, Gurudwara Chowk, Labour Chowk, Post Office Chowk and near Kangra Co-operative Bank.
2. Solar street lighting is proposed to be installed along the road within the planning area.

9.6 Telecommunication System

The telecom services provided in Nadaun are as follows:

- i. Landline operations requiring a telecom cable and junction box space in utility corridor
- ii. Wireless services on GSM / CDMA platform requiring tower at stipulated radii
- iii. Broad band Services requiring a cable corridor and distribution chambers
- iv. Short Coverage Wi-Fi networks

A telecommunication network is proposed to be provided in a manner so as to have connectivity by different service providers. Consumer can select the services of telecom service provider according to good quality of network for providing these data and tele communication facilities.

In order to achieve it, Optical fiber cables are proposed to be use to provide and connect various service providers for telecom as well as broadband services to the users through the optical fiber network. To run the cabling, the provision for laying the conduit and chamber in front of all the plots has been proposed.

It is envisaged that all the people will have at least one mobile connection in person and one landline connection in each house. In addition all the shops, offices industries and other institutions buildings will have landline connections. Hence, the estimated that the number of mobile connections would be 19251 and that of landline/ broadband would be 6456. Refer for further details.

Table 9-10: Telecommunication Connections, 2035

S. No.	Description	Mobile Connections	Landline Connection
1	Population	17501	
2	Households		3889
3	Industry		223
4	Govt. Inst.		893

5	Institutional		112
6	Wholesale Trade		449
7	Retail-cum-shopping		893
8	Floating Population	1750	
	TOTAL	19251	6459

Source: Estimated based on Housing and Economic Projections

Presently, there is a telephone exchange in Nadaun, which is sufficient to cater to 50,000 population. Hence, for the extension of services to new areas, additional network lines needs to be laid.

Thus, it is proposed that telecommunication ducts be laid along the roads within the service/utility corridor with provision of conduit and chamber in front of all the plots.

10 Environment

10.1 Introduction

Himachal Pradesh is enriched with various species of flora and fauna which need to be conserved and preserved. The development should go hand in hand with environmental improvement and resource optimization. The sustainable growth can only be achieved if existing environmental parameters are identified and analysed.

10.2 Forest Cover

In Nadaun Planning Area, 13.48% land is covered by forests. It is less than the district average i.e. 21%. The south-eastern portion of the Planning area is under Demarcated Projected Forest (DPF) cover namely DPF Tillu and DPF Kuthar, located at the both sides of NH-3.

Out of the total forest area, 91.84% is categorized as the Demarcated Protected Forest and 8.16% is Other Forest. Refer Map E\04 for Forest Cover in the Planning Area. These forest areas shall be conserved and would function as green lungs Nadaun Planning Area.

The Other forest can be used for collecting forest produce ensuring livelihood for the local people in the area. Afforestation and regularized tree felling can be promoted for boosting the forest related economy in the region.

Forest is an important asset to planning area and need to be safeguarded for providing sustained benefits to the community and diversion of such land to other purpose should be done after careful examination from social and environmental standpoint.

A buffer around the boundary needs to be maintained as per the HP TCP Rules, 2015. The minimum distance of 5.00 m from Forest boundary and minimum distance from existing tree shall be 2.00 m shall be maintained.¹⁹

¹⁹ Himachal Pradesh Town and Country Planning (Amendment) Rules, 2015

10.3 Air Quality

There are no air quality monitoring stations located within 10Km. of the Nadaun town. According to the CPCB standards there should be an air quality monitoring station near each major settlement. The air quality analysis cannot be presented as the nearest monitoring station is located at Una which is almost 71 km from the Planning area.

10.4 Water bodies

10.4.1 Surface Water

The planning area fall within drainage basins of Beas River. The Kunah Khad and Man Khad form the eastern and western boundaries of the Planning area. There are ample numbers of surface water sources which are utilized for supplying the potable water to the households.

The quality of water of the Beas River and Man Khad is within the permissible limits. The water is alkaline in character with high Dissolve Oxygen and low BOD. As per the CPBC standards the water in both Beas and Man Khad are fit for drinking after disinfection. Refer Table 0-1.

Table 0-1 Water Quality Monitored in between Dhera Bridge and Nadaun Bridge

Indicators	Present Condition	According to CPCB Standards
pH Level	8.65	6.5-8.5
DO Level	7.6	6.0
BOD Level	1.0	2.0

Source: HPSPCB and CPCB Standards

10.4.2 Conservation of Water-bodies

As per the MoEF guidelines²⁰ 100m buffer from HFL of the river should be given. However, Himachal Pradesh being a hilly state where land is scarce, the state has adopted a policy of limiting buffer to 25mt. No building activity shall be carried out within this 25m buffer protection from the HFL of river Beas and the same shall be maintained as green buffer zone. The construction shall be allowed at distance of 3.00 Metre and 5.00 Metre from Nallah and Khad respectively²¹.

The river front areas may be developed based on proper planning with proper shelter design on the water expanse with attractive laser shows for tourists and visitors during festive seasons.

Any degradation of wetland or surface water body would lead to habitat loss for birds, aquatic species and rare vegetation. To check depletion of water bodies the development plan recommends the following-

- Dumping of waste in the water bodies is prohibited
- Encourage suitable recreational facility around water body to keep surveillance.

10.4.3 Ground water

²⁰ Since the River Regulation Zone Guidelines are in formulation/ draft stage. Hence, CRZ guidelines have been referred to.

²¹ Himachal Pradesh Town and Country Planning (Amendment) Rules, 2015

Ground water resources and irrigation potential of the region has not been studied and computed as per the GEC-97 methodology, as the aquifers are isolated and discontinuous in nature. Ground water quality is within the permissible limit of safe drinking water set by Bureau of Indian Standard (BIS)²².

Major potential areas for the ground water development are the valley fill deposits, occurring along Beas River between Sachuhi and Nadaun, lower reaches of Man khad and central part of Kunah Khad. The aquifer thickness may vary from less than 10 m to about 100 m so far, the valley fills or fault zones have not been explored or studied on macro level for assessing the potentialities of ground water resources in the district. Rainfall infiltration is the principal source of ground water recharge to the aquifer system in the district. Inflow seepages from *khads*/ rivers also contribute to the ground water resources/reserves

10.4.4 Rain Water Harvesting

Individuals can do a great deal to improve the water availability and ensure the water quality of their locality by practicing Rain Water Harvesting as a mandatory measure in all public buildings as well as judicious use of storm water for agricultural use. In this regard, many published standard manuals are available for adoption.

10.5 Disaster Prone Areas

10.5.1 Hamirpur District

District Hamirpur is prone to various hazards both natural and manmade. In the district the geological hazard, mainly earthquakes, landslides and soil erosion are most critical than hydro-metrological hazard i.e., the flash flood, cloud burst and drought and forest fire.

The disasters, which generally occur in this district and their level of vulnerability is shown in Table 10-2. According to Hazard Vulnerability of Himachal Pradesh, Hamirpur district has High threat of Earthquake and Very High threat of forest fire. (District Disaster Management Plan Hamirpur, 2016).

Table 0-2: Type of disasters in Hamirpur District

Hazard Type	Level of Vulnerability
Earthquake	High
Landslide	Low
Floods	Low
Forest Fire	High
Drought	Medium
Cloud Burst	Low

Source: Disaster Management Plan Hamirpur, 2016

Table 0-3: Ground Water Quality, Hamirpur District

Indicator s	pH	EC μS/cm at 25°C	HCO 3	Cl	So4	NO 3	F	C a	M g	N a	K	Total Hardness as CaCO3
(in mg/l)												
Min	8.0 2	280	12	10	1	2	Tr	30	11	7. 5	0. 6	120

²² Ground Water Information Booklet, Hamirpur District, Himachal Pradesh

Max	8.17	360	153	125	85	22	0.16	48	17	14	5.8	165
------------	------	-----	-----	-----	----	----	------	----	----	----	-----	-----

Source: Ground Water Information Booklet, Hamirpur District, Himachal Pradesh

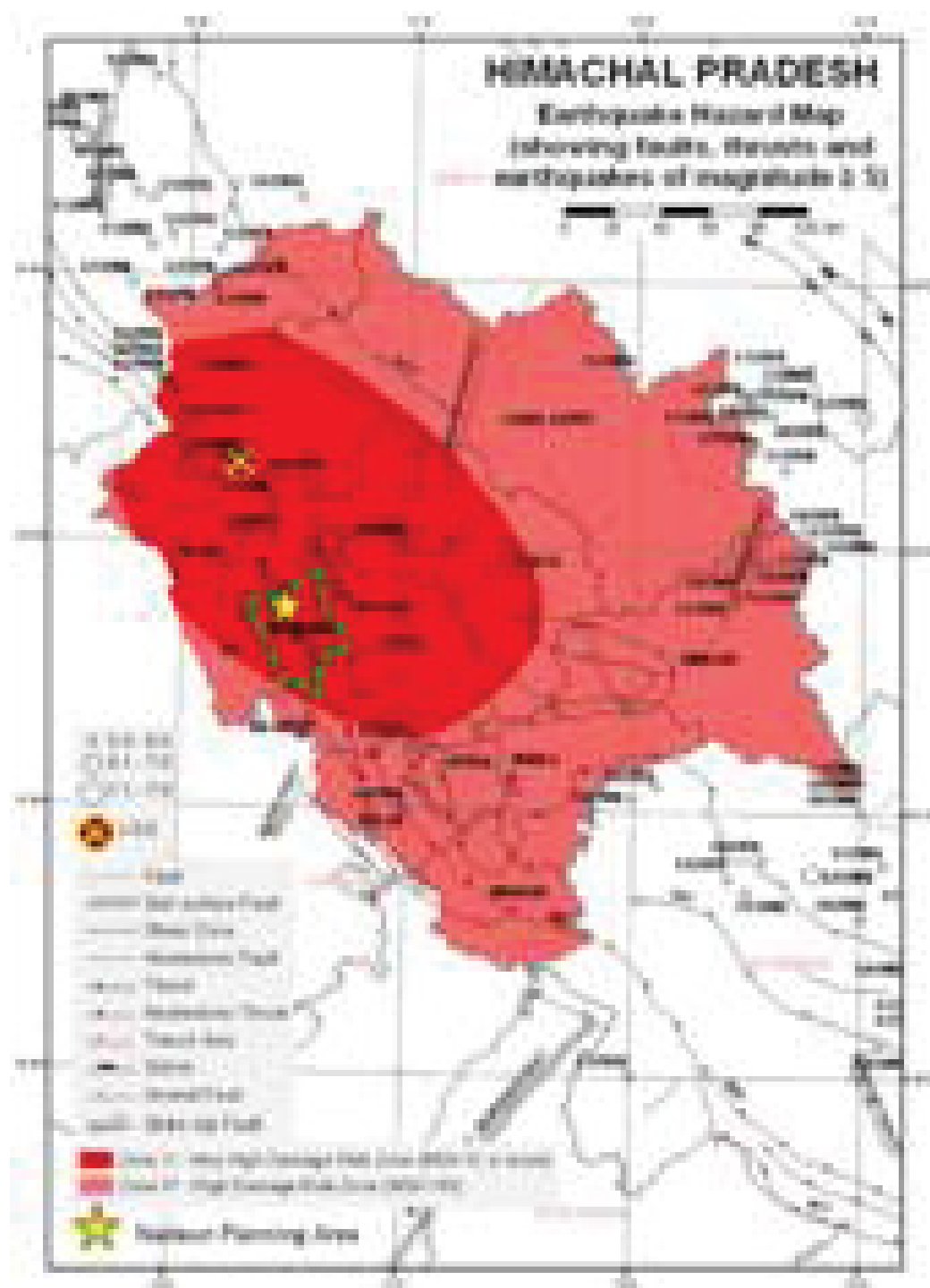


Figure 0-1: Earthquake Hazard Map

Source: Department of Environment, Science and Technology, Himachal Pradesh

In terms of Earthquake hazard risk profiling, almost entire Hamirpur district (91%) falls in Zone V which is a very high damage risk zone. The last earthquake hit the region in 1905 which took a toll of death of almost 20,000 people in the region with a magnitude of more than 8 (according to the Richter scale). The following

Figure 0-1 shows the intensity of earthquake hazard zones in all over Himachal Pradesh.

10.5.2 Nadaun Planning Area

Nadaun Planning area is prone to natural hazard like earthquake. Nearest structural fault line is 600 meters away from northern boundary of planning area. Though there is no structural fault line in Nadaun Planning area but it is important to take measure in order to avoid earthquake disasters.

However due to unstable sub-soil in the hilly terrain in Bela village, there are few occurrences of landslides during rainy season near SDM Colony. The area has also been demarcated as landslide prone area by the administration.

The planning area is also vulnerable to road accidents and fire incidents.

In spite of being located in high vulnerability zone in terms disaster intensity, no such preparedness mechanisms are observed at individual and community level.

10.6 Measures for Disaster Management

DDMP Hamirpur, 2015 shall be adopted for prevention, mitigation and preparedness plan. Wide dissemination of earthquake-resistant building codes, the National Building Code 2005 shall be adopted for earthquake resistant structures.

A Disaster Management Centre has been proposed in Nadaun planning area on 1 ha of land in Bharmoti Kalan area with suitable open area (2 ha) for soft parking, temporary shelter etc. This centre would accommodate a Fire Station and Trauma Centre for coordination at the time of emergencies. The Trauma Centre should be on 1 hectare of land and have a minimum of 100 beds. This would be linked with lower order Trauma Centres to be provided in selected hospitals

The following policies and strategies for Disaster Management are proposed:

10.6.1 Pre-Disaster Preparedness

- The Fire Services department being the nodal agency for disaster management, should identify vulnerable areas e.g. areas with high density and poor accessibility in the town and propose suitable measures.
- Sensitize people about after effects of disaster particularly school children.
- Make people aware through media campaigns and advertisements about emergency procedures and location of emergency shelters etc.
- Undertaking mandatory safety audits on structural designs of Old and New major building/projects by the respective competent authorities related to all Government and Private Buildings.
- The mock drills to tackle the disaster situations should be arranged under SDM's supervision. This should be organised in every local govt. authority (both Gram Panchayat and Nagar Panchayat) in a particular interval.
- Disaster relief Committee should be set up at Gram Panchayat Level and Nagar Panchayat level where involvement of a particular percentage of female members would be mandatory.

10.6.2 Post Disaster Management

It has been observed that any disaster is generally followed by break down of communication lines and disruption of essential services. Therefore, the key communication centres should be safely located to be free from natural disasters e.g. flood, fire and earthquake with provision for wireless and satellite based communication facilities.

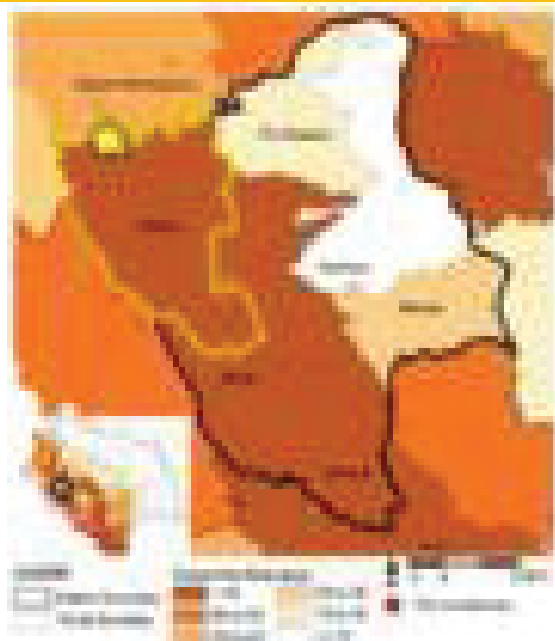


Figure 0-2: Tehsil wise forest fire risk area of Hamirpur district

Source: Hazard Vulnerability and Risk Analysis Atlas, Disaster Management Cell, Department of Revenue, HP

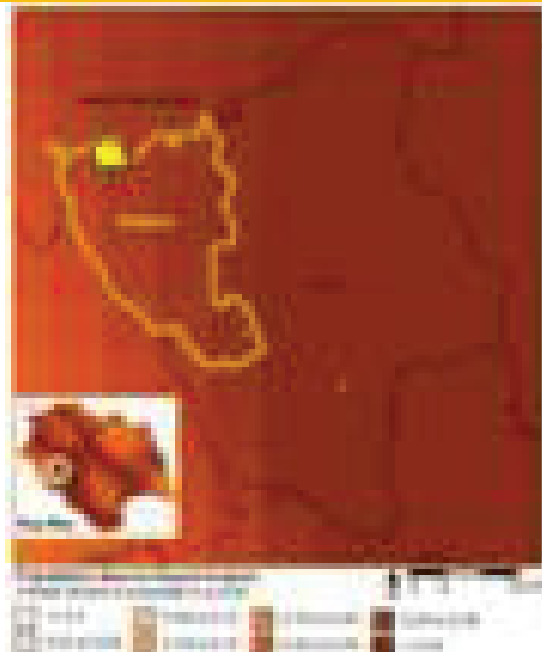


Figure 0-3: Probabilistic seismic hazard analysis

Source: Hazard Vulnerability and Risk Analysis Atlas, Disaster Management Cell, Department of Revenue, HP

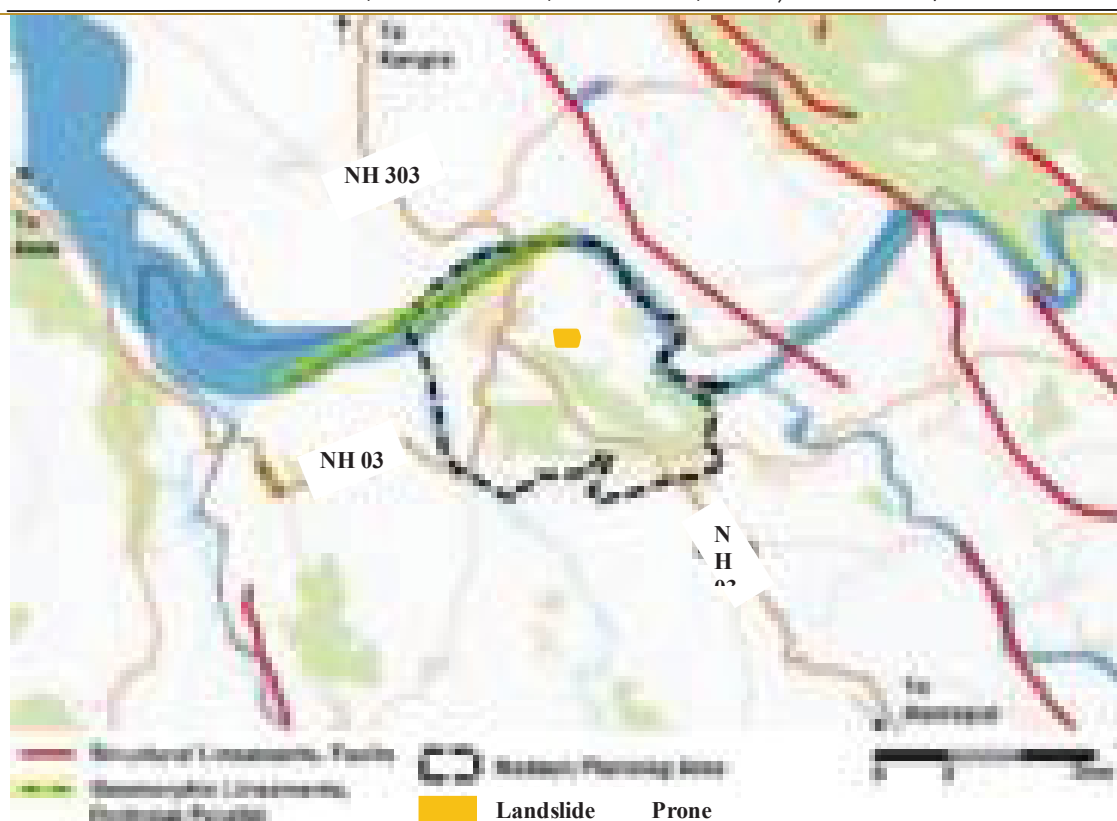


Figure 0-4: Location of Lineament and Landslide Prone Area in Nadaun Planning Area

Source: Bhuvan HP state portal <http://bhuvan.nrsc.gov.in/state/HP#>

10.7 Forest Fire Measures

Capacity building for the better use of early warning (technical efficiency and HRD): The forest officials need to be trained in using various indicators to get prior information about forest fire at the earliest time possible to take timely action. The forest department may be provided with necessary equipment in detecting forest fire at the earliest possible. Forest officials are to be trained in using various valuable information, available at national and international levels and translate it for local use.

Construction of watch towers for monitoring fire incidence is essential and shall be included in zonal management plan.

11

Stakeholder Consultation

11.1 Introduction

This chapter describes the outcomes of the participatory process adopted for the preparation of the Nadaun Development Plan. A rigorous stakeholder consultation Programme was adopted to take inputs of all relevant stakeholders at State, District and Town level. The consultation Programme was executed at 2 levels as follows: -

- **Town Level Consultations (Ward wise public consultations, consultations with Nagar Panchayat, local politicians, Government officers and citizens)**

• **Household level consultations (questionnaire survey)**

During the Inception stage a number of discussions and meetings were conducted to introduce the process of preparation of the Development Plan to the citizens of Nadaun. The process of consultations was continued in all stages.

11.2 Stakeholder Profile

The Stakeholders can be broadly classified as follows:

CATEGORY	STAKEHOLDERS
Town Level	<ul style="list-style-type: none"> • Ward wise public consultations • Members of Nagar Panchayat, Local politicians • Government officers • Citizens • Representatives of health sector • Representatives of Traders and Industrial Associations • Academic Institutes • Representatives of Real Estate Developers • Media • NGOs
Household Level	<ul style="list-style-type: none"> • Local residents

Various stakeholder groups were identified during the Initial Stage of Project. Two core groups of stakeholders were identified: -

- **Primary Stakeholders**, beneficiaries of a development intervention or those directly affected (positively or negatively) by it. They include local population (resource persons, community, students etc.) in the project/program area, poor and marginalized groups who have traditionally been excluded from participating in development efforts such as kachhi basti and slum dwellers, and organizations such as NGOs, trader's organizations, hoteliers and other associations.
- **Secondary Stakeholders**, those who influence a development intervention or are indirectly affected by it. They include the borrowing government, line ministry and project staff, implementing agencies, local governments, civil society organizations, private sector firms and other development agencies.

11.2.1 Local Steering Group

A Local Co-ordination committee was formed by TCPD. This committee was chaired by the TCP (Hamirpur).

Table 0-1 Local Level Steering Group

OFFICIAL MEMBERS		
	Town and Country Planner(Hamirpur)	Chairman
	Secretary (NP Nadaun)	Member
	Planning Officer (Hamirpur)	Member
	Assistant Town Planner(Hamirpur)	Member Secretary
NON-OFFICIAL MEMBERS		
	Planning Officer (Retd.)	Member

The two main functions of this group are:

1. Eliminating any bottleneck in project progress.

2. Guidance in Visioning and Policy matters.

11.3 Consultation Programme

Major Issues highlighted by Stakeholders

The major issues in the town highlighted by various stakeholders are listed below.

Date: 25th October, 2016

Venue: SDM Office, Campus Hall

Number of participants: 44

Issues/Suggestions

Environment

-
1. Alternative new sources of energy should be developed.
 2. Open-defecation should be control near the Beas River.
 3. For water conservation, the maintenance of Beas River and its buffer area is necessary.
 4. Tree plantation should be initiated every year on fixed target 1,000 trees per year.
 5. There should be development of a botanical garden.
-

Roads and Transportation

-
6. There should be installation of solar traffic signals at every main road junction.
 7. The encroachment should be removed along the roads.
 8. Parking provisions should be proposed at a suitable place or near the Petrol Pump.
 9. Accidents frequently occurs on National Highways because of high speeding which causes several deaths, so there should be some provisions of traffic signals and sign boards along the NH at a suitable distance.
 10. Pedestrian pathways should be provided within the urban roads.
 11. NH road should be four lanes.
 12. More connecting roads needed in town.
 13. Bus Stand should be shifted near
 14. Encroachment of roads and other land should be checked.
-

Water Supply, Sewerage and Drainage, Electricity and Other Services

-
15. Fire station should be proposed inside the town.
 16. All wards should be provided with piped water supply.
 17. Sewerage system should be provided in the town.
 18. Advanced water treatment plant should be constructed.
 19. Old wells should be repaired.
 20. Water stagnation in the Bus Stand.
 21. Provision of waste collection Bins at suitable fixed locations.
 22. No Drainage System in the town.
 23. Nallah should be channelized.
 24. Landfill and Dumping sites should be provided for the town.
-

Housing

-
25. Proper arrangement of housing for slum dwellers.
 26. All residents living in Kuccha Houses should get Pucca Houses.
-

Social and Economic Aspects

-
27. Improvement of Health facilities.
 28. Higher Education institutes needed.
 29. Educational and Commercial Hubs should be proposed within the town.
 30. Horticulture should be encouraged and proposed.
 31. Employment opportunities should be provided for the people.
 32. A planned Market should be constructed.
 33. Community Hall should be constructed in every ward.
 34. Good Cinema Halls and public recreation places should be developed.
 35. Police patrolling should be increased in all wards.
-

Tourism

-
1. Government should promote Nadaun as a tourist place.
 2. *Paudiyan* should be preserved by the concerned authority.
 3. Pattan Bazaar should be taken into account for tourism purpose.
 4. Heritage sites should be conserved e.g. Nadaun fort, Gurudwara, etc.
 5. Town's image and aesthetic look should be improved to boost tourism.
 6. Taxi rates should be notified by Govt.
-

Governance and Other Aspects

-
7. Public participation should be ensured in Town Development Planning.
 8. Unauthorized development should be stopped in the town.
-

11.3.2 Proceedings of Town Level Consultation Meeting

A one-day Stakeholders' Consultation Meeting was held at SDM Office, Campus Hall, Nadaun. Around 44 people participated in the Meeting.

Meeting Proceedings

The stakeholders appreciated the participants for their contribution in town's development. He described various major issues of the town, like in water supply, solid waste management, traffic and transportation, sewerage, drainage, etc. He talks about the improvement in the public services like parks and playgrounds, education, health, affordable housing and also talk about the need in environmental facilities like solar power generation, waste management, Rain water harvesting, etc.

Apart from the above inputs, he also talks about some other facilities which should be proposed in the city like firefighting department, Children's playground, vehicular parking area, conservation and maintenance of various historical *paudiyan* along the Pattan bazaar till Beas River.

Few raised various issues for town progress. He suggested that there should be a provision of street light on the police station road and Beas river Bridge, provision of Traffic lights at all the junctions is an urgent necessity, taxi rates should be decrease and notified by Govt., stray animals are a major issue for the town hence government should take action and solve this problem.

Outcome of Meeting

- **Sectors which needs to be addressed on highest priority were identified.**
 - a. Sanitation
 - b. Waste management
 - c. Sewerage
 - d. Drainage
 - e. Tourism
 - f. Encroachment and haphazard development
 - g. Economic opportunities
 - h. Traffic and Transportation
 - i. Environment

11 SWOT Analysis

STRENGTH	WEAKNESS
<p>1. Located at a Strategic Junction: The Planning Area is located at a strategic junction of NH-3 and NH-303. It has direct connectivity with all the important District Head-quarters State Capital (Shimla), Chandigarh and Delhi by road.</p> <p>2. High Decadal Growth: Nadaun had witnessed a higher decadal growth in the past two decades as compared to the District.</p> <p>1. High Literacy Rate: The Planning Area has a higher literacy rate of 91% as compared to that of the District.</p> <p>2. Regional Trading Centre: Nadaun is traditionally a trade town with a very competitive market Nadaun being a Hub of Trade and Educational facilities witnesses a huge daily floating population of children, traders and visitors.</p> <p>3. Educational Hub: Nadaun is host to a large variety of educational facilities starting from primary to higher secondary schools to Degree College to professional and vocational institutions.</p>	<p>1. Congested Market: Nadaun is not vulnerable to water based natural hazards as such Floods. But, it is highly susceptible to man-made disasters such as road accidents (on the NHs) and stampede (Pattan Bazaar). Fire is another hazard which is highly vulnerable due to small congested market area.</p> <p>2. No Pedestrian walkways: There are no facilities for pedestrian walkway in the planning area.</p> <p>3. No traffic management in the planning area which causes traffic congestion.</p> <p>4. No Designated Public Parking Places.</p> <p>5. Inadequate Public toilets in market.</p> <p>6. Inadequate public parks and other recreational facilities.</p> <p>7. Irregular and insufficient Water supply.</p>

<p>4. Rich Agricultural Belt: Developed on the banks of the River Beas, Nadaun is rich in agriculture and horticulture produce especially fresh local vegetables.</p> <p>5. Large Forest Cover: Nadaun has about 1/3rd area under forest including two DPFs which acts as permanent green lungs to the planning area.</p> <p>6. Cricket Ground positioned at National Level: Nadaun is host to Atal Bihari Vajpayee Cricket Stadium which has the capacity to hold national level cricket matches.</p>	<p>8. Poor Physical Infrastructure: Nadaun has inadequate basic infrastructure facilities like drainage, sewerage and solid waste management.</p> <p>9. Degradation of Natural and Cultural Heritage</p> <p>10. Community Facilities: Inadequate number of community halls and community facilities.</p> <p>11. Lack of Disaster Management Cell in the planning area.</p> <p>12. No Fire Station: Even though there is high risk of fire within the Nadaun Town, there is no fire station in the town.</p>
OPPORTUNITY	THREATS
<p>1. Huge Tourism Potential</p> <ul style="list-style-type: none"> • Old heritage structures can be conserved for promoting heritage tourism • Riverfront development can be done to encourage tourism. • Eco-tourism can be introduced in the green lungs of the planning area • Cricket stadium can act as a catalyst for sports tourism. <p>2. Potential for Agro-based Industrial Base: Nadaun lies in the agriculture and horticulture belt and has huge potential for processing and packaging industries in the planning area.</p>	<p>1. High Risk of Natural Disasters: The planning area falls in Zone V which is a very high damage risk zone. This might act as a deterrent in development of this area.</p> <p>2. High Investments: Development will involve high cost in laying and maintaining infrastructure for tourism. Hamirpur being district headquarter may get more priority for development as compared to the Planning area.</p>

13.1 Planning Perspective

The Development Plan caters for three levels namely the Nagar Panchayat, Planning Area and Influence Zone with a radius of about 20 kilometres. It envisages for the requirements of population of Planning Area, dependent regional population and tourists during peak season. The proposals

have been recommended in view of community aspirations, effective role of local bodies, and by inculcating the participatory approach of private and public sectors. The Development Plan is contemplated as a document of common man, a document of the public/community and that of the local bodies, authorities and the Governance.

13.2 Projections

Projections for the Development Plan have been worked out in view of analysis of surveys and studies and the anticipations emanated thereof on one hand and public aspirations, on the other. Population of Nadaun Planning Area is anticipated to increase to 17501 by the year 2035. As 51 percent of the total population is anticipated to be workforce, there are likely to be 8926 workers, for whom provision of work areas is envisaged in the Development Plan.

13.3 Growth Drivers

Locational advantage:

The Planning area is located at a strategic junction point of NH-3 and NH-303. It has direct connectivity with all the important district head-quarters and state head-quarter of Himachal Pradesh, Chandigarh and National Capital by road. The villages inside the Planning Area connected by the village roads. Settlements have been developed in a scattered way inside the Planning Area due to its terrain and physical attributes.

Emerging Growth nodes and direction of development:

The major growth center is Nadaun town. The direction of growth is along the highway towards Hamirpur. The growth nodes have been identified in the Planning area based on the Population distribution, service allocation and exiting connectivity. The growth nodes are the second order settlements which serve the third order settlements in the Planning area. The identified growth nodes are located at Bela, Gagal and Jalari.

Administrative importance:

Nadaun is the sub-divisional head quarter of Nadaun Tehsil. It is also the block head quarter of Nadaun block.

Education institutes

There are few important education institutes located in the Planning Area near Nadaun Town like Himachal Institute of Pharmaceutical Education and Research, Him Institute of Fashion Designing, Vijay Vallabh College of Education, Sidharth Government College, Maa Jwala ITI etc.

Commercial Zone

The town was known as the Pattan or the ferry town. The town is the main commercial hub in the region.

Places of Interest:

There are various places of interests in and around the Nadaun Planning Area. The Dasvin Patshahi Gurudwara and Atal Bihari Vajpayee Stadium are located in the Nadaun Planning Area. The Jwalaji temple is located 11 km north to the Planning Area. The Sansar Chand Fort is located at Sujanpur which is almost 30 km from Nadaun Town.

13.4 Development Limitations

1. A large part of land in the planning area is covered with demarcated forest area which needs to be preserved and conserved.
2. Agricultural land available near the Khad and the River would be retained as rich agricultural land.
3. About 2.05 ha of land is located at steep slope zone i.e. more than 45° which is completely non-developable.
4. About 120.90 ha of land is under forest which has to be conserved and hence not available for development.
5. About 27.64 ha of land is under green buffers and water bodies which also needs to be protected

Thus, 728.80 ha of land is available for development in the planning area. Out of which 132.60 ha of land is already developed. Hence, the net area available for future development is 596.20. Ha. Refer Map No. A/05.

13.5 Concept

It is envisaged to develop Nadaun Planning Area as a tourism-cum-trade hub with encouragement to agriculture. As the planning area has the potential for development of *Mandi* town due to proximity to major agriculture towns and also being the block headquarter. A *Mandi* zone is proposed along the National Highway.

The planning area is adequately planned to prevent urban sprawl. The money invested in laying infrastructure can be recovered from the revenue generated by tourism. Transit zone and *mandi* can emerge as an instrument to drive economic growth.

Tourism zone is envisaged to be developed near the Nadaun Fort and Gurudwara Dasvin Patshahi along Beas River. To provide for the incoming tourists, a hospitality zone is proposed at the centre of the planning area. All the supporting facilities and amenities will be developed so that it caters to the tourists.

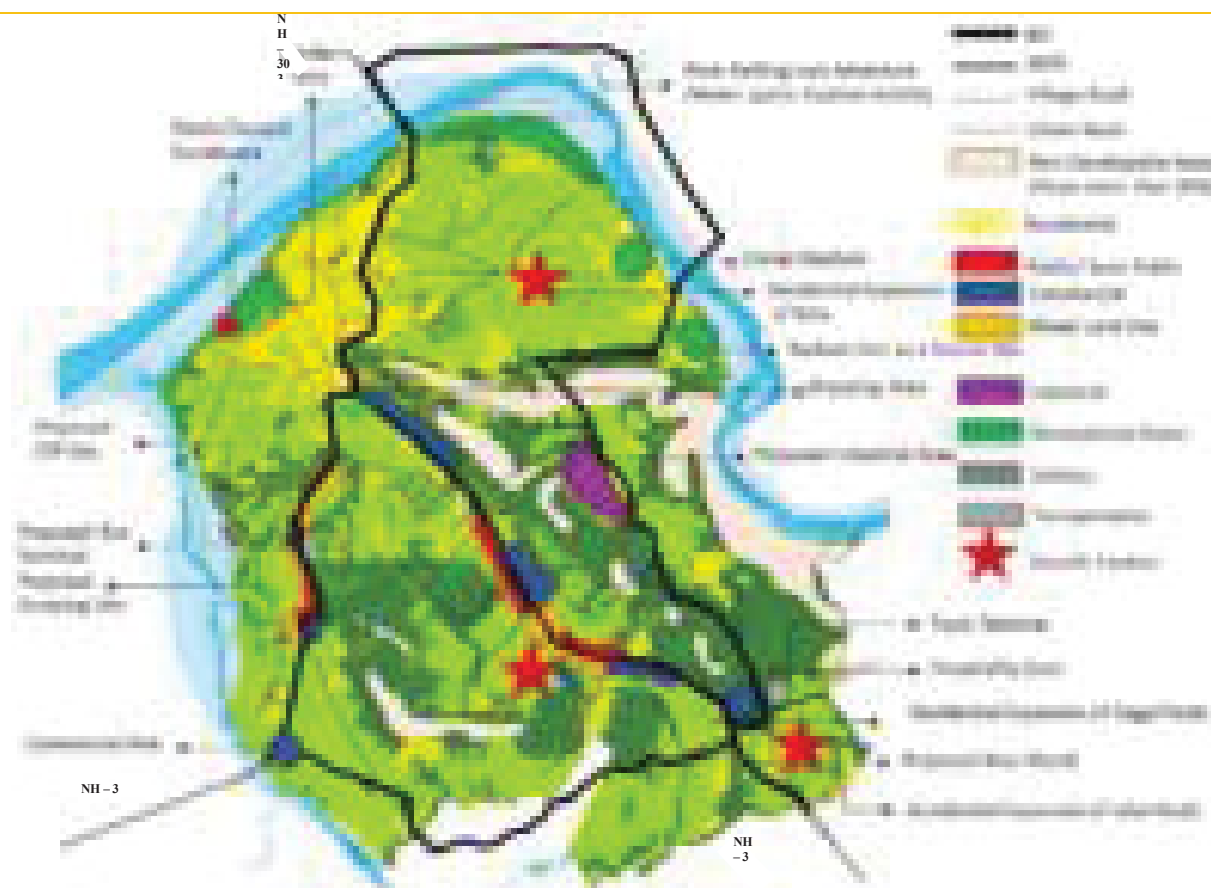


Figure 0-1: Development Proposals

13.6 Development Pattern

A visit to Nadaun town reveals that ribbon development is in progress. It may lead to linear development along with major roads if not planned, regulated and controlled now with statutory means. There will be a tendency to construct shops, houses right up to the edge of the roads. Some would even encroach upon the carriage ways. There shall also be a tendency to park vehicles along roadsides. This shall turn these roads into long tunnels bounded by frequent bottlenecks. A road is constructed at a huge cost and the society pays a big amount for its maintenance as well as its up-keep. Laying of road in hill areas is not an easy affair. Therefore, it is imperative to induce future development not along the main roads, rather away from them by way of sectoral development.

While town-level facilities have been worked out and marked on the Development plan, sites of sector level facilities shall be specifically proposed at the time of preparing Sector Plans.

13.7 Strategies

(A) Decongestion of Market Street of core town area

Development of market street precinct of core areas of Nadaun town in order to declutter them for better pedestrian movement and accessibility through following strategies:

1. Heavy vehicles to be restricted during peak hours, which are primarily for loading and unloading of goods and be allowed during non-peak/late hours. In case if loading/unloading is required during peak hours, a systems of loading bays and non-loading bays must be declared depending upon the high pedestrian traffic movement.
2. Provision of parking zones for 4 wheelers at various places with in range of 300 m (walkable distance) from the dense area.

3. Provision of alternate routes for the through traffic to avoid unnecessary congestion.
4. Segregation of vehicular and pedestrian movement/ circulation by separate pedestrian walkways on the high-density roads eventually to comfort pedestrian movement and avoid chaos due to 4 wheelers parked on road sides.
5. Certain activities generating heavy vehicular traffic (ex. Vehicle repair shops, huge whole sale stores) must be shifted away from the dense streets.

(B) Prevention of unplanned Ribbon development

Ribbon development, which is considered as a negative outcome of urban sprawl is prevalent in Nadaun especially towards the roads radiating out from the town core towards south – west connecting Amb and south – east connecting Bilaspur. The unintended and unplanned ribbon growth adjacent to NH-3 needs to be curbed and planned to accommodate future possibilities by preparation of guideline and regulation for development along NH-3 by the authority to achieve following:

1. Junctions generating conflicts between pedestrian and vehicular movement needs to be identified and planned accordingly. Also, activities with large spill over needs to be relocated from NH towards other low dense streets/roads.
2. Road stretches where large no of public activities are opening directly on NH should be provided with a service lane to cater the entrances opening directly on NH. Alternatively, at these stretches parallel connecting roads to NH can be proposed where the activities open on the inside roads to congestion on NH.
3. Provide green buffer belt at the road stretches which are adjacent to agriculture land and low density residential clusters to curb possibilities of future ribbon development.
4. Junctions where the arterial roads are connecting the sub-arterial/ secondary road (town or village road) must be taken special care to avoid conflict.
5. Major entrances or roads opening/connecting to NH must be at a minimum distance of 300m from each other.
- 6.

(C) Development of new urban area in Bela

In Nadaun Planning Area limit, the recent trends in urban sprawl shows that instead of migration towards Nadaun town (municipal area) the villages are growing majorly within themselves. The reasons are because of existing and upcoming major public facilities and amenities.

Cricket stadium in Bela village is an attraction of such importance which is stimulating the population growth. With certain other features in the surrounding the area is projected as another centre of importance for urban growth. The following aspects must be considered in framing the policy and guidelines for integrated development of the area.

1. The cricket stadium must be developed with other indoor and outdoor sports facilities to accommodate state level activities and events.
2. Fort of Nadaun should be notified under list of heritage buildings of state and must be developed for public use by conserving, restoring or proposing adaptive reuse of the historical structure.

3. Proposed 6 lane road crossing through the area and bypassing Nadaun urban area is improving the accessibility and connectivity of Bela area. This road stretches and its junctions must be planned to avoid any future possibilities of ribbon development.
4. River bed must be used for seasonal adventure water sports activities and is proposed as start point of 16 km Long River rafting till Dhera Town Bridge.
5. The recreational area on river edge.
6. A district level botanical garden adjacent to the proposed road on the river edge must be developed as part of integrated development of the region.
7. A 50-100 m of buffer must be kept between the heritage structure and built development as open and green area with permissible agriculture and recreational facilities only.
8. A river side walk way connecting heritage area with the cricket stadium could be developed for recreation purposes with good public amenities and facilities.

(D) Development of Town level socio - cultural space

Bus stand currently situated in the core town area of Nadaun town is relocated at 700 m away on NH towards south-west of Nadaun urban area. Its current location is in the urban centre and lies at the junction which bifurcates the NH with various commercial and mixed-use establishments. This combination of different activities and better connectivity makes it feasible for public use of what.

Therefore, the existing bus stand site with hill top at Tillu Pratham adjacent to the main road must be developed comprehensively for public facilities and recreation. The demarcated sites can have activities like cinema hall, community hall, town hall, library, open garden, food and snacks counters and seating kiosks. It can also have complimentary, appropriate uses like utility and grocery shops, weekly *haat* etc. for common public use.

(E) Conservation of heritage and natural environment: Natural features in the form of forests and rivers needs to be conserved. These large ecological greens can be developed for ecotourism. Here a visit to fragile, pristine, and relatively undisturbed natural areas, intended as a low-impact and often small-scale alternative to standard commercial (mass) tourism can be conducted. Conserving the old heritage structure in the planning area and developing a tourist circuit. This will also improve the economy of the local people.

(F) Provision for physical and social infrastructure: Provide basic infrastructure facilities to all. Every household in urban area should have water supply and sewerage connection. Health, education, security, recreational, social and cultural facilities to be distributed throughout the town. The development will provide housing and amenities for people and families of all cultures, ages and incomes.

(G) Resolving Urban issues: Provision of more public spaces and proper utilization of land as it is scarce resource in hilly areas. Problems of traffic congestion and parking is the most important urban issue to be dealt with appropriately.

(H) Encourage economic activity:

The upcoming development intends to position itself as an economic engine and generate employment. The light industrial, trade center, *Mandi* and promoting agriculture along with a strong infrastructure base will attract new businesses and entrepreneurs to this development.

(J) Developing Education hub: The development intends to offers a full range of educational opportunities for citizens at every stage of their lives. Many schools, colleges and universities will offer excellent, innovative academics and enhance the human capital of the settlement and region. An educated, skilled and well-trained workforce will contribute to support the development as the economic hub of the region and a major competitor for national and international enterprise and industry.

(K) Affordable housing for all: A slum free town by rehabilitating and providing urban poor housing.

13.8 Proposals and Recommendations

13.8.1 Housing

In order to cater for the requirements of housing for the anticipated population of 17501 persons in the Planning Area by the year 2035, at the rate of 4.5 persons per family norm, nearly 3889 families shall be residing in the planning area. Considering the present housing shortage of 311 dwelling units, about 4200 dwelling units shall be required by the horizon period 2035. In view of present trend of low residential density, at the rate of 75 persons per hectare, 104.83 hectares of additional area is required to cater to the additional population of 7589. As 132.60 hectares area is existing, therefore, the total developable area by 2035 would be 237.43 hectares including 2.37 hectares of facilities and amenities.

In Nadaun Planning Area, as the residential development is envisaged to be primarily on the private lands on one hand and acquisition being not preferred by the land owners, the onus of development of residential areas vest with them. The land owners are to ensure either planned sub-divisions of land or land pooling and reconstitution of the plots and accordingly development therein, ensuring provision of convenient shopping, basic service infrastructure including water supply, sewerage drainage, electric supply, road and other requisite facilities and services in view of creation of plots. The owners may construct houses only for their own purpose without exhausting this process. The housing areas are proposed to be developed by integrating future work areas and evolving safeguards for forest areas. The proposed housing sectors/ clusters are proposed to be developed on the neighbourhood principles of self-sufficiency by making provision of requisite infrastructure therein. The concerned local body/Panchayat will be responsible for ensuring the implementation of basic services and infrastructure at local level, by raising the resources through process of undertaking remunerative schemes in the area on land to be got surrendered in its name during the course of Land Pooling and Reconstitution mechanism. In case of bigger land parcels of vacant land the same are to be developed by a development agency which has to play an effective role.

13.8.2 Trade and Commerce

The existing commercial area comprising of old bazaar (Pattan Bazaar) and the Main Bazaar and will continue to function as such. Commercial activity in the developing new areas shall be allowed in a planned manner only. Following proposals are being made with regard to trade and commerce: -

9. There is a need of wholesale and warehousing market (Mandi) for both Fruits and Vegetable and Grains for the town. The same is being proposed over an area of 1.29 hectares at Jalari at the cross junction of NH-3 and MDR 36.
10. While the main bazaar shall continue to act as the Town Centre of Nadaun town. There shall be sector-level or cluster level shopping in various sectors of the town. Such shopping centres shall help ease off pressure on main bazaar. The following norms are suggested for planning the above-mentioned shopping centres: -

- a) Sector-level shopping centre-45 to 50 shops for a population of 5000 persons.
- b) Convenient shopping centre-10 to 15 shops for a population of 1000 persons.

11. In order to cater to the envisaged tourist population visiting Nadaun hotel and related activity is proposed along NH-3.

Nadaun is a traditionally a trade and historic town. In view of increase in trading activities and boost of tourism in the region, it is proposed to develop a commercial hub at in Tillu Pratham village along the NH-3 and about 10 hotels shall be required to cater to the tourist population by the year 2035. The land required for plot @ 350-400 sq.m. area per hotel which includes parking and circulation area works out to 1.67 hectares. Beside this, an area of 1.84 hectares is required for Retail Shopping Centre at Jalari, Kuthar and Tillu Khas villages. Thus, total requirement works out to 8.70 hectares. As existing area under commercial use is 6.88 hectares, therefore, total additional requirement works out to 1.82 hectares.

13.8.3 Mixed Use

Mixed land use zone has been proposed at strategic location along the NH-3 and NH-303. It accounts of an area of 2.41 hectares within the planning area.

13.8.4 Industry

There are no industrial unit operating in the town presently. In order to cater for the requirements of anticipated secondary work force of 893 workers, @ 115 sq.m. area per worker, an area of 10.27 hectares is required for Industry by the year 2035.

It is proposed to develop an industrial estate in Tillu Khas village along the proposed 24m wide by-pass on about 10.27 Ha of available government land. Non-polluting and non-hazardous small-scale or cottage industrial units are proposed in the industrial area viz., Handicraft industries, and agro processing industries.

The existing flour mills as well as saw mills operating within residential buildings (if any) needs to be shifted from their present location. No floor mill or saw mill shall be permitted within a residential pocket.

13.8.5 Transportation

An area of 21.83 hectares is under the existing transportation network. Town level, inter-sectoral, sectoral and cluster roads are required to be developed in the Planning Area.

With increase in traffic it is envisaged that present NH-3 and NH-303 will not be able to accommodate traffic hence, it is proposed to increase the width of the present NH-3 and NH-303 from present 10 m ROW to 15 m ROW.

As most of the traffic entering Nadaun is E to E i.e., External to External, two by-passes have been proposed one parallel to NH-3 and NH-303 traversing from the right bank of Beas river and entering Bela near Nadaun Fort and then entering Tillu Khas village before meeting NH-3 at Jalari and the other connecting old NH-70 (new NH-3) and old NH-88 (new NH-3) via Bharmoti Kalan at Jalari. The NH-303 and NH-3 by-passes have been proposed with an ROW of 24 m and the other by-pass of 15 m ROW.

Three junction improvements have been suggested one at present junction of NH-3 and NH-303 near the Bus stand, another at the junction of NH-3 and proposed By-pass in Bharmoti Kalan and at the junction of NH-3 with the two proposed by-passes at Jalari.

A truck terminal is proposed at the cross junction of the proposed by-pass and MDR-36 in Jalari Saunkhlan. The truck terminal proposed on Government land measuring an area of about 0.62 hectares. The truck terminal has been strategically located in close vicinity of the proposed Wholesale and Warehousing Centre (Mandi) located on the other side of the NH-3 in Jalari village as the two activities are correlated and dependent on each other.



Figure 0-2: Proposed Transportation Facilities

The present bus terminal is in the heart of the town in the main market. As per the traffic projections it is envisaged that the present bus terminal will not be able to accommodate the future traffic volume of vehicles/people. Hence, a new bus terminal is proposed along NH-3 in an area of about 0.56 hectares in Nagarada village.

A part from these, new roads of 6m and 9m and widening of important roads have also been proposed in the planning area

To cater to the town level parking requirement, parking lots and taxi stand have been proposed at various locations amounting to an area of 1.0 ha. Local level parking requirements of each land use zone have to be met locally.

13.8.6 Tourism

The development of tourism in and around Nadaun call for systematic and planned development, check on encroachments, cleanliness of town, integration and systematic and planned marketing of tourist destinations in surrounding areas, like Nadaun Fort and other heritage sites within the planning area and provision of basic amenities at genuine rate.

In order to boost the tourism activity in the Planning Area it is proposed to repair and restore the Nadaun fort, develop the adjoining area in to a tourist spot with landscaped gardens, pathways and sitting arrangements. It is further proposed to conduct light and sound show to present the rich history of the Nadaun Fort.

It is also proposed to develop other heritage sites within the planning area as tourist sites.

13.8.7 Public and Semi Public

An area of 11.33 hectares is existing under utilities, facilities and services. It is anticipated that an area of 2.35 hectares will be required more for providing various facilities at Regional to Cluster level in the Planning Area by the year 2035 as per the requirements. Refer Table 0-1.

Table 0-1: Area allocation for various facilities zone-wise

(lxix) Sr. No.	(lxx) Facilities	(lxxi) Area (lxxii) (in Ha)
(lxxiii) 2	(lxxiv) Primary School	(lxxv) 0.50
(lxxvi) 3	(lxxvii) Dispensary	(lxxviii) 0.05
(lxxix) 4	(lxxx) Family Welfare Centre	(lxxxi) 0.15
(lxxxii) 7	(lxxxiii) Sub Post Office	(lxxxiv) 0.15
(lxxxv) 8	(lxxxvi) Police Post	(lxxxvii) 0.20
(lxxxviii) 9	(lxxxix) Police Station	(xc) 0.50
(xci) 10	(xcii) Fire Station	(xciii) 0.50
(xciv) 11	(xcv) Banquet Hall	(xcvi) 0.15
(xcvii) 12	(xcviii) Community Welfare Centre	(xcix) 0.15
(c)	(ci) TOTAL	(cii) 2.35

Source: Estimated based on URDPFI Guidelines

A Water Treatment Plant has been proposed in Bela along the Beas River for which an area of 0.24 hectares have been provided.

13.8.8 Parks and Open Spaces Use

The town lacks in organised parks and open spaces. Local Parks are therefore, required to be developed at cluster/sector level. At the rate of standard of 1.00 hectares per 1000 population, 17.50 hectares land is required to cater for population of the Planning Area by the year 2035. As 7.27 hectares area is existing, therefore, 18.92 hectares area is required more. It is proposed to develop the old Nadaun Fort area into a tourist spot-cum-recreational area with landscaped gardens with fountains, and conducting light and sound show within it.

About 10 hectare land has also been earmarked for proposed Botanical and Zoological Park in Tillu Khas village.

13.8.9 Forest Areas

Nearly about 111.06 hectares of land falls under Demarcated Protected Forest use in Nadaun Planning Area. This has been indicated in the existing land-use map as well as the proposed land-use map. It is proposed to maintain and preserve all these forest areas. However, due to widening of Tillu Khas road, the area under DPF has reduced to 109.38 hectares.

13.8.10 Water Bodies Use

The land under Water Bodies i.e. 105.51 hectares shall remain without change in land use.

14 Land use

14.1 Introduction

The Existing land use of the Nadaun Planning Area was frozen under section -15A of the H.P. Town and Country Planning Act, 1977 on 25.10.2016. The existing land use was prepared, notified and adopted after considering public objections and suggestions. The present Planning Area includes 11 revenue villages besides, Nadaun Nagar Panchayat.

14.2 Existing Land Use Plan

The existing land use plan has been prepared on the contoured Base Map provided by AGiSAC (Aryabhatta Geo Informatics Space Application Centre), Department of Environment, Science and Technology, Shimla. The Base Map has been prepared on World View-2 satellite image having 0.45 m resolution. After interpretation of land utilisation or land cover from the satellite imagery, a predominant land use survey was conducted to identify the various land uses within the settlement area.

The land use classification is specified in the URDPFI Guidelines have been adopted for the planning area.

Of the total land in Nadaun Planning Area (897.39 Ha) only 132.60 Ha i.e., 14.77% is developed and remaining 764.79 i.e., 85.22% is under developed. Of the total developed land, about 64.32% is residential area while 5.18% of the land is under commercial use. Transportation which includes road and other transportation facilities constitutes an area of 21.83 Ha i.e., about 16.47% of the total developed area. The public and semi-public area and open green area in Nadaun Planning Area account for nearly 8.55% and 5.48% of total developed area of Nadaun Planning Area.

Table 0-1 shows the land use distribution of Nadaun Planning Area, Nadaun Nagar Panchayat Area and the land use distribution of developed area of the planning area.

The total Nadaun Planning Area has about 57.51% land under agriculture, 13.48% land under forest which includes about 12.38% land under Demarcated Protected Forest and 1.10% under Other Forest. River Beas along with this bank cover about 11.76% of the total area under Nadaun Planning Area.

14.2.1 Residential Use

It comprises of 85.29 hectares area which works out to be 9.50 percent of the Planning Area. The residential areas are generally occupied by two to three storied houses. The housing areas are sprawling along the highways, around the old town, village *abadis* and in the agricultural fields.

The old residential localities are along the old Bazar and old Bus Stand in the central area of Seri and Kot Villages. The new extensions are coming up along the two National Highways particularly in Bela village. The new SDM Colony has also come up in Village Bela. Residential use intermix with the commercial use is a common phenomenon. Shops on ground floor on the road side and remaining structure for residential purpose is a common sight.

Commercial Use

Most of the commercial establishments are located within the Pattan Bazaar, along NH-3 and NH-303 and in the vicinity of the Main Market at the Bus stand

The commercial use consists of 6.88 hectares which is 0.77% of the Planning Area. The construction of shops along roads emanating from town is a common phenomenon.

Temporary shops or *khokas* are located here and there, only a few organised shopping centre can be seen on NH-303 in front of the Bus stand

Table 0-1: Land use Distribution, 2016

Co de	Land use Category	Nadaun Planning Area		Developed Area		Standards (by URDPFI)
		Area (in Ha)	Percentage of Total Land	Area (in Ha)	Percentage of Developed Land	
1	Residential	85.29	9.50%	85.29	64.32%	50-55%
2	Commercial	6.88	0.77%	6.88	5.18%	2-3%
a	Retail shopping and General Business	1.31	0.15%			
b	Warehousing and Service Sector	5.57	0.62%			
3	Public and Semi Public	11.33	1.26%	11.33	8.55%	8-10%
a	Facilities and Amenities	11.01	1.23%			
b	Utilities and Services	0.32	0.04%			
4	Recreational	7.27	0.81%	7.27	5.48%	15-18%
a	Playground/ Stadium/ Sports Complex	5.23	0.58%			
b	Parks & Gardens	0.74	0.08%			
c	Multi-open Spaces	1.29	0.14%			
5	Transportation	21.83	2.43%	21.83	16.47%	5-6%
a	Road	21.53	2.40%			
b	Transportation Facilities	0.31	0.03%			
6	Primary Activity	548.21	61.09%			
a	Agriculture	516.07	57.51%			
b	Plantation	22.30	2.49%			
	Forest	9.83	1.10%			

7	Protected and Undevelopable Use	216.58	24.13%			
a	Water Bodies	105.51	11.76%			
b	Demarcated Protected Forest	111.07	12.38%			
	TOTAL	897.39	100.00%	132.60	100.00%	

Source: Land use Map based on Base Map prepared by AGiSAC

14.2.3 Public and Semi-Public Use

Under Public and Semi-Public Use, facilities comprising of education, health, postal, police etc. including government and semi-government offices occupy an area of 11.01 hectares. The utilities including water supply, sewerage, electricity, telephone establishments and garbage disposal sites comprise an area of 0.32 hectares. Thus, total existing land use under public and semi-public use is 11.33 hectares which is 1.26% of the total Planning Area.

14.2.4 Parks and Open Spaces

The organized Parks and Open Spaces are scarce and presently occupies an area of 7.27 hectares which is negligible of the Planning Area. The citrus trees in the forests within and around the town are in plenty and the same are serving as green lungs and areas for passive recreation. The town enjoys unique environmental setting. The ground adjacent to the SDM office is the only space for organizing cultural activities in the town.

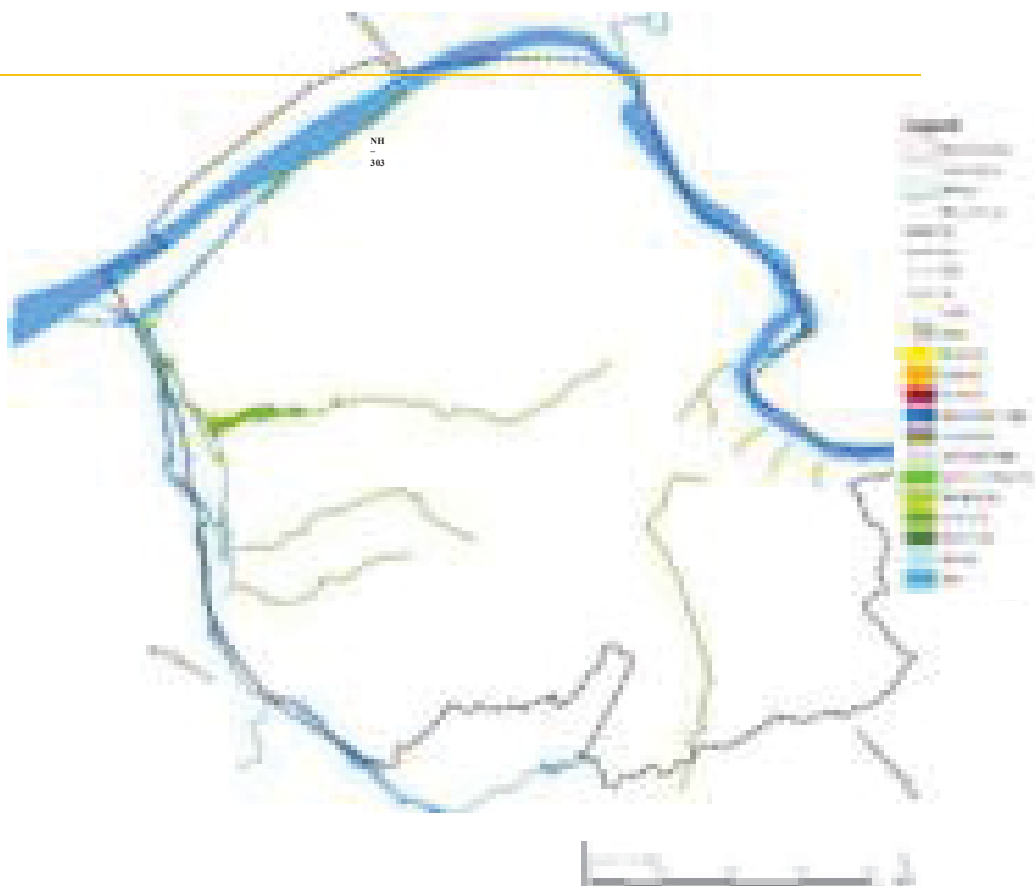


Figure 0-1: Existing Land use Map of Nadaun Planning Area, 2016

Source: Based on Field Survey

14.2.5 Traffic and Transportation Use

The major roads including National Highways and those emanating from the town as well as those interlinking the different localities have an area of 21.53 hectares. The area under-transportation facilities such as bus stand is 0.31 hectare, thus, total area under traffic and transportation use is 21.53 hectares, which is 2.43% of the total Planning Area.

14.2.6 Agriculture use

Agriculture land occupies 516.07 hectares which is 57.51% of the Planning Area. The agriculture land. Apart from this, the planning area has land under plantations which account to 22.30 ha which is 2.49% of the total land in the planning area.

14.2.7 Forest use

An area of 120.90 hectares is under the forest which is 13.48% of the Planning Area. The 120.90 hectares of land comprises of 111.07 hectares of Demarcated Protected Forest and 9.83 hectares of other Forest areas.

Water Bodies Use

The area under water bodies primarily rivers, *nallahs* and Khad is 105.51 hectares which is 11.76 percent of the Planning Area.

14.3 Principles of Land Use Proposal

1. All the public facilities and amenities as per URDPFI guidelines are majorly demarcated on the government land and proposals are kept limited up to availability of land under agriculture land use categories minimizing need for land acquisition.
2. The development plan caters to the individual growth of the villages/growth centres and is planned as per the needs of the immediate population by providing all basic amenities and facilities.
3. The urban growth by change in existing land use is proposed mostly under agriculture land use category.
4. To improve accessibility and to shift traffic from core areas in order to reduce congestion, few roads are proposed majorly on agriculture land use.

14.4 Land Allocation Mechanism

Allocation of developable land for different uses to meet with the requirements for the next 20 years i.e. up to the year 2035 is made and proposed land-use structure devised accordingly. Appropriate land uses have been proposed keeping in view the availability of developable land in each sector, holding capacity in terms of population and activities, existing land use of the area, development potentials, conformity of land use of its surrounding areas, threshold population for facilities, locational attributes of amenities, site characteristics, convenient distance of work areas from residential area, land values etc.

The growth of the 11 villages outside the Nagar Panchayat Area has been envisaged in the vicinity of existing village settlement based on their projected population. The total additional land area for development has been worked out based on the gross residential density as 75 pph which accounts to 101.18 ha.

Out of 897.39 hectares of land within Planning Area, 237.43 hectares (26.46%) is proposed as developable area whereas 659.96 hectares of land (73.54%) has been retained as peri-urban area comprises of Agriculture, Forest, and Water Bodies uses. The 135.90 hectares (15.14%) is proposed for low density residential use. As the Government land is scarce almost entire infrastructural development including roads, commercial activities, residential activities, has to take

place on private land in accordance with population of the area, topographical conditions and potentials and propensities of land. The land owners, however, resist for any sort of proposal for community uses and compel the authorities to change the proposals. Approach of negotiated proposals has, therefore, been envisaged in the Development Plan. Further detailing of proposals will have to be done in accordance with prescribed zoning and sub-divisions regulations by the local bodies in primarily built up areas, the Revenue Department and the development agency through limited land acquisition, land pooling reconstitution mechanism involving land owners in the new areas.

Uses pertaining to various economic activities like trade, commerce, tourism, industries and income generating amenities if, segregated and provided separately in patches are unsustainability. Similarly, facilities and services like schools, nursing homes, banks, telephone exchange and other financial institutions also needs to be close proximity of the habitation. On the contrary, Government and Semi-Government Offices, Postal Facilities, Police Service etc. are essentially town level facilities which can be at a central location away from the habitation as well. The Development Plan, therefore, addresses the central and local activities for town level/regional and sectoral pursuits respectively. The related requirements thereof including parking, parks, open spaces and circulation networks are to be detailed out in view of the local setting in accordance with the prescribed zoning regulations.

14.5 Proposed Land use Classification

The land in the proposed Development Plan has been categorized into nine Land Use Zones:

Table 0-2: Proposed Land Use Classification, 2035

(ciii) Sr. No.	(civ) Land use Classification	(cv) Land Use Sub-Classification
(cvi) 1	(cvii) Residential Use: R	(cviii) 1. Existing Residential: R1 (cix) 2. Proposed Residential: R2
(cx) 2	(cxi) Commercial Use: C	(cxii) 1. Retail Shopping Zone and General Business: C1 (cxiii) 2. Hospitality/ Hotels/ Lodges: C2 (cxiv) 3. Wholesale, Go-downs, Warehousing/ Regulated markets and Service Sector: C3
(cxv) 3	(cxvi) Mixed Use: M	(cxvii) -
(cxviii) 4	(cxix) Industrial Use: I	(cxx) -
(cxxi) 5	(cxxii) Public/Semi-Public Use: PS	(cxxiii) 1. Govt./ Semi Govt. / Public Offices: PS 1 (cxxiv) 2. Educational and Institutional: PS 2 (cxxv) 3. Medical and Health Facilities and PS 3 (cxxvi) 4. Heritage and Socio-Cultural: PS 4 (cxxvii) 5.: Other Amenities/ Utilities and Services PS 5
(cxxviii) 6	(cxxix) Recreational Use: R	(cxxx) 1. Playground/ Stadium / Sports Complex: PS 1 (cxxxi) 2. Parks & Gardens: PS 2 (cxxxii) 3. Multi-Open Space (<i>Maidan</i>): PS 3
(cxxxiii) 7	(cxxxiv) Transport Use: T	(cxxxv) 1. Road (cxxxvi) 2. Railway (cxxxvii) 3. Bus Depots/ Truck Terminals (cxxxviii) 4. Parking-

(cxxxix) 8	(cxI) Primary Activity Use: PA	(cxli) 1. Agriculture: PA 1 (cxlii) 2. Plantation: PA 2 (cxliii) 3. Forest: PA 3
(cxliv) 9	(cxlv) Protected and Undevelopable Use: E	(cxlvi) 1. Water bodies: E1 (cxlvii) 2. Protected Forest: E2 (cxlviii) 3. Green Belt/Buffer: E3 (cxlix) 4. Undevelopable use zone: E4

14.6 Proposed Land Use Plan

14.6.1 Residential Use

On the basis of residential density of 75 persons per hectare, an area of 135.90 hectares (15.14%) has been proposed for the residential purpose. The residential areas are proposed to be developed in and in the surroundings of the Nagar Panchayat Areas around the existing settlements. The residential area accounts to 57.24% of the developable area. i.e., 237.43 hectares. The local activities of cluster level enlisted in Chapter 8 such as nursery and primary schools, dispensaries, parks, toilets etc. form an integral part of the residential areas and are to be detailed out during the further course of preparation of Zonal, Sectoral Plans and Schemes.

14.6.2 Commercial Use

A total area of 8.70 hectares (0.97%) has been proposed for Commercial use. Most of the commercial facilities have been proposed near the residential area in order to cater to the residing population. Other town level facilities viz., Wholesale and Warehousing activity (Mandi) and Service Sector of 5.19 hectares has been proposed along the NH-3. Shopping centres are proposed to be developed along with sizeable shops and requisite infrastructure, along the NH-3 in Tillu Pratham village. Moreover, the Development Plan envisages to prepare improvement schemes for the existing shopping centre to ensure improvement in environmental quality.

In order to cater to incoming tourist in the town, an area of 1.67 hectares (0.19%) has been allocated. It includes the area required for boarding and lodging of future tourist traffic which may come up within the Nadaun Planning Area along with other conforming land uses.

14.6.3 Mixed Land Use

As area of 2.41 hectares (0.27%) has been allocated for mixed use development at strategic locations along the National Highway within the planning area.

14.6.4 Industry Use

As area of 10.27 hectares (1.14%) has been allocated for industrial development with the planning area. It is proposed to accommodate agro based, horticulture and forest based industries apart from handicraft and cottage industries in form of organized industrial area.

14.6.5 Public and Semi-Public Use

The Public and Semi-Public Use includes utilities, facilities, services, Government and Semi Government offices and Institutions. The Utilities i.e. water supply, sewerage, drainage, electricity, telephone establishments, garbage disposal etc. and Facilities like education, health, postal, police, fire fighting, banking etc. besides Government and semi Government offices etc. have been given due consideration for allocation of a land for this purpose in the Development plan. These Institutions have extraneous influence zone beyond the immediate hinterland. These institutions are proposed to be developed through their own mechanism by the respective authorities.

The existing land under public and semi-public facilities is 11.33 hectares and additional requirement of 2.37 hectares is anticipated by providing utilities, facilities and services in the Planning Area by the year 2035. Accordingly, 13.70 hectares (1.53%) of land is proposed under Public and Semi-Public use.

14.6.6 Parks and Open Spaces Use

An area of 26.19 hectares (2.92%) has been proposed for organised parks and open spaces which includes 10 hectares of Botanical and Zoological Park apart from organized green spaces such as parks and playgrounds.

14.6.7 Traffic and Transportation Use:

As the town has grown around junctions of NH-3 and NH-303, there is a lot of regional traffic on these narrow roads for which improvement in road network is proposed in the shape of bye-pass road. Traffic and Transportation Use:

As the town has grown around junctions of NH-3 and NH-303, there is a lot of regional traffic on these narrow roads for which improvement in road network is proposed in the shape of bye-pass road.

The Development Plan envisages to provide parking lots on outskirts of the existing built up area to meet with the requirements of increasing traffic volume on major entry points to already congested town.

An area of 40.26 hectares (4.49%) has been proposed for Traffic and Transportation Use, out of which 21.83 hectares is an existing area occupied by roads and parking spaces and 18.42 hectares is additional requirement which includes 1.18 hectares of land for new bus terminal and truck terminal. 1.00 hectares of land for taxi stand and parking and 16.28 hectares of area for proposed by-passes and widening of existing roads.

14.6.8 Undevelopable Use

Undevelopable use zone shall be identified as all earthquake/landslide prone, cliffs and environmentally hazardous area, areas adjacent to fault lines, areas with slope higher than 45 degree (NBC), flood plain and other areas identified by State Disaster Management Authority and all the environmentally sensitive areas

Nadaun Planning Area has about 0.77 hectares of Undevelopable Area which accounts to 0.09% of the total land.



(cl)

(cli) Figure 0-2: Proposed Land Use Plan

Table 0-3: Land use Distribution, 2035

Co de	Land use Category	Nadaun Planning Area		Developable Area		Standar ds (by URDPFI)
		Area (in Ha)	Percent age of Total Land	Are a (in Ha)	Percent age of Total Land	
R	Residential	135.90	15.14%	135.90	57.24%	50-55%
R1	Existing Residential	83.29	9.28%			
R2	Proposed Residential	52.60	5.86%			
C	Commercial	8.70	0.97%	8.70	3.67%	2-3%
C1	Retail Shopping Zone and General Business	1.84	0.21%			
C2	Hospitality/ Hotels/ Lodges	1.67	0.19%			
C3	Wholesale, Warehousing/ Regulated markets and Service Sector	5.19	0.58%			

M	Mixed Land Use	2.41	0.27%	2.41	1.02%	
I	Industry	10.27	1.14%	10.27	4.32%	3-4%
PS	Public and Semi Public	13.70	1.53%	13.70	5.77%	8-10%
<i>PS₁</i>	<i>Govt./ Semi Govt. / Public Offices</i>	<i>4.45</i>	<i>0.50%</i>			
<i>PS₂</i>	<i>Educational and Institutional</i>	<i>3.77</i>	<i>0.42%</i>			
<i>PS₃</i>	<i>Medical and Health Facilities</i>	<i>0.99</i>	<i>0.11%</i>			
<i>PS₄</i>	<i>Heritage and Socio-Cultural</i>	<i>0.88</i>	<i>0.10%</i>			
<i>PS₅</i>	<i>Other Amenities/ Utilities and Services</i>	<i>3.62</i>	<i>0.40%</i>			
P	Recreational Green	26.19	2.92%	26.19	11.03%	15-18%
<i>P1</i>	<i>Playground/ Stadium/ Sports Complex</i>	<i>5.23</i>	<i>0.58%</i>			
<i>P2</i>	<i>Parks & Gardens</i>	<i>19.40</i>	<i>2.16%</i>			
<i>P3</i>	<i>Multi-open Spaces</i>	<i>1.56</i>	<i>0.17%</i>			
T	Transportation	40.26	4.49%	40.26	16.95%	5-6%
<i>T1</i>	<i>Road</i>	<i>37.81</i>	<i>4.24%</i>			
<i>T2</i>	<i>Bus Depots/ Truck Terminals</i>	<i>1.18</i>	<i>0.13%</i>			
<i>T3</i>	<i>Parking</i>	<i>0.06</i>	<i>0.01%</i>			
<i>TS</i>	<i>Taxi Stand</i>	<i>0.94</i>	<i>0.10%</i>			
PA	Primary Activity Use	431.49	48.08%			
<i>PA₁</i>	<i>Agriculture</i>	<i>408.97</i>	<i>45.57%</i>			
<i>PA₂</i>	<i>Plantation</i>	<i>22.01</i>	<i>2.45%</i>			
<i>PA₃</i>	<i>Forest</i>	<i>0.52</i>	<i>0.06%</i>			
E	Protected and Undevelopable Use	228.47	25.46%			
<i>E1</i>	<i>Water Bodies</i>	<i>105.51</i>	<i>11.66%</i>			
<i>E2</i>	<i>Demarcated Protected Forest</i>	<i>109.38</i>	<i>12.19%</i>			
<i>E3</i>	<i>Green Buffers</i>	<i>13.70</i>	<i>1.53%</i>			
<i>E4</i>	<i>Undevelopable Area</i>	<i>0.77</i>	<i>0.09%</i>			
	TOTAL	897.39	100.00%	237.43	100.00%	

Source: Estimated based on Proposed Land use

Plan Implementation

15.1 Introduction

The Development Plan contains provision for a projected population of 17501 people which is anticipated to reside in Nadaun Planning Area by the end of year 2035 through period of 20 years. The total area covered within Nadaun Planning Area is 897.39 hectares. The 111.06 hectares of land covered under DPF and 104.52 hectares under Water Bodies has been retained as such. An acute shortage of funds for acquisition of land for public purposes is a great challenge to the administration to ensure a sustainable integrated development pattern. Therefore it has been proposed to adopt a people's participatory approach for an optimum accomplishment. It will only be possible with the joint efforts of Nagar Panchayat and the Gram Panchayats included in the Nadaun Planning Area and the Department of Town and Country Planning which is nodal agency for planning in the State.

For the horizon year 2035, it is envisaged that about 101.18 ha of land is required for development out of 897 ha of the Nadaun Planning Area. Though Phasing, costing and implementation of Development Plan is to be contemplated by integrating it as part of Five Year Plans and keeping in view development priorities to meet needs of growing population, yet in view of socio-economic dynamics likely to persist after the course of five years on one hand and in consonance with the national policy of preparation of rolling plans on the other. The programme for implementation of each successive phase has to be worked out in view of reviewing at interval of 5 years' time frame i.e. after each phase. For implementation of Development Plan, necessary serviced land have to be developed in view of planning provisions to the channelise growth of the town according to the Development Plan. In implementation of this Development Plan, Nagar Panchayat Nadaun and Gram Panchayats are proposed to play an instrumental role for bulk services, however, the State Govt. has to make allocation either to the Department of Town and Country Planning or to Infrastructural Departments.

15.2 Phasing

The Development Plan is a regulatory instrument to guide the development through horizon period of 20 years. Since it is not possible to clearly foresee the entire scenario with reference to the financial aspects that is likely to emerge over such a long period, therefore, the Development Plan is considered to be a long-term policy document which is to serve as a guide for development and must be reviewed after every five years to incorporate all the changes on priorities. The first phase is very important as it gives lead to the development pattern that is to be followed in subsequent phases.

To implement the proposals made in previous chapter in a phased manner, following phases have been proposed: -

Phase I	2016-2021
Phase II	2021-2026
Phase III	2026-2031
Phase IV	2031-2035

Details of activities to be undertaken in each phase is given in the table below:-

(clii) Sr. No.	(cliii) Activities/Use	(cliv) Phase I (clv) 2016-21	(clvi) Phase II (clvii) 2021-26	(clviii) Phase III (clix) 2026-31	(clx) Phase IV (clxi) 2031-36
(clxii) 1	(clxiii) Commercial	(clxiv)	(clxv)	(clxvi)	(clxvii)
(clxviii) a	(clxix) Re-vitalisation of Pattan Bazaar	(clxx) ✓	(clxxi)	(clxxii)	(clxxiii)
(clxxiv) b	(clxxv) Wholesale market/warehousing at Jalari junction	(clxxvi) ✓	(clxxvii)	(clxxviii)	(clxxix)
(clxxx) c	(clxxxii) Revival of Sericulture Farms	(clxxxii) ✓	(clxxxiii)	(clxxxiv)	(clxxxv)
(clxxxvi) d	(clxxxvii) Hotels and Restaurants	(clxxxviii)	(clxxxix) ✓	(cxc) ✓	(cxci)
(cxcii) e	(cxciii) Service Sector - Repair shops	(cxciv) ✓	(cxcv) ✓	(cxevi)	(cxevii)
(cxeviii) 2	(cxcix) Industrial	(cc)	(cci)	(ccii)	(cciii)
(cciv) a	(ccv) Handicraft and Cottage Industries	(ccvi) ✓	(ccvii) ✓	(ccviii)	(ccix)
(ccx) b	(ccxi) Agro-processing Industries	(ccxii)	(ccxiii) ✓	(ccxiv) ✓	(ccxv)
(ccxvi) 3	(ccxvii) Traffic and Transportation	(ccxviii)	(ccxix)	(ccxx)	(ccxxi)
(ccxxii) a	(ccxxiii) 24m wide Proposed new by-pass	(ccxxiv)	(ccxxv) ✓	(ccxxvi)	(ccxxvii)
(ccxxviii) b	(ccxxix) 15m wide NH-3 by pass via Bharmoti Kalan	(ccxxx)	(ccxxxi)	(ccxxxii) ✓	(ccxxxiii)
(ccxxxiv) c	(ccxxxv) Widening of existing NH to 15m and other local roads	(ccxxxvi) ✓	(ccxxxvii)	(ccxxxviii)	(ccxxxix)
(ccxl) d	(ccxli) Junction Improvements	(ccxlii)	(ccxliii)	(ccxliv) ✓	(ccxlv)
(ccxlv) e	(ccxlvii) Truck Parking at Jalari	(ccxlviii)	(ccxlix) ✓	(ccl)	(ccli)
(cclii) f	(ccliii) Bus Terminal at Nagarada along NH-3	(ccliv) ✓	(cclv)	(cclvi)	(cclvii)
(cclviii) g	(cclix) IPT System – CNG Autos and Electric Rickshaws	(cclx) ✓	(cclxi)	(cclxii)	(cclxiii)
(cclxiv) h	(cclxv) Public Transport System – Mudrika Bus Sewa	(cclxvi)	(cclxvii) ✓	(cclxviii)	(cclxix)
(cclxx) i	(cclxxi) Relocation of Taxi stand	(cclxxii)	(cclxxiii) ✓	(cclxxiv)	(cclxxv)

(clii) Sr. No.	(cliii) Activities/Use	(cliv) Phase I (clv) 2016-21	(clvi) Phase II (clvii) 2021-26	(clviii) Phase III (clix) 2026-31	(clx) Phase IV (clxi) 2031-36
(cclxxvi) j	(cclxxvii) Parking lots at strategic locations	(cclxxviii) ✓	(cclxxix) ✓	(cclxxx) ✓	(cclxxxi) ✓
(cclxxxii) k	(cclxxxiii) Pedestrianisation of Pattan Bazaar	(cclxxxiv) ✓	(cclxxxv) ✓	(cclxxxvi)	(cclxxxvii)
(cclxxxviii) l	(cclxxxix) Installation of Flood light at junctions	(ccxc) ✓	(ccxci) ✓	(ccxcii) ✓	(ccxciii)
(ccxciv) m	(ccxcv) Installation of Traffic lights at junctions	(ccxcvi) ✓	(ccxcvii) ✓	(ccxcviii) ✓	(ccxcix)
(ccc) n	(ccci) Installation of Solar Street lights	(cccii) ✓	(ccciii) ✓	(ccciv) ✓	(cccv)
(cccv) 4	(cccvii) Tourism	(cccviii)	(cccix)	(cccx)	(cccxi)
(cccxii) a	(cccxiii) Development of Nadaun Fort as a tourist / picnic spot	(cccxiv)	(cccxv) ✓	(cccxvi)	(cccxvii)
(cccxviii) b	(cccxix) Repair and Restoration of Nadaun Fort	(cccx) ✓	(cccxxi) ✓	(cccxii)	(cccxiii)
(cccxiv) c	(cccxv) Light and sound show at Nadaun Fort	(cccxvi)	(cccxvii) ✓	(cccxviii) ✓	(cccxix)
(cccxix) d	(cccxxi) Development of other heritage sites	(cccxii)	(cccxiii)	(cccxiv) ✓	(cccxv) ✓
(cccxvvi) e	(cccxvii) River rafting from Dhera to Nadaun	(cccxviii) ✓	(cccxix)	(cccxl)	(cccxli)
(cccxlii) f	(cccxliii) Camping Sites at River Beas	(cccxliv) ✓	(cccxlv)	(cccxlvi)	(cccxlvii)
(cccxlviii) 5	(cccxlix) Facilities	(cccl)	(cccli)	(ccclii)	(cccliii)
(cccliv) a	(ccclv) Nursery and Primary Schools	(ccclvi)	(ccclvii) ✓	(ccclviii)	(ccclix) ✓
(ccclx) b	(ccclxi) Establishment of Kendriya Vidyalaya	(ccclxii) ✓	(ccclxiii)	(ccclxiv)	(ccclxv)
(ccclxvi) c	(ccclxvii) Dispensary	(ccclxviii)	(ccclxix)	(ccclxx) ✓	(ccclxxi)
(ccclxxii) d	(ccclxxiii) Nursing Home and Family Welfare Centre	(ccclxxiv) ✓	(ccclxxv)	(ccclxxvi) ✓	(ccclxxvii)
(ccclxxviii) e	(ccclxxix) Post Office	(ccclxxx) ✓	(ccclxxxi)	(ccclxxxii) ✓	(ccclxxxiii)
(ccclxxxiv) f	(ccclxxxv) Police Post / Station	(ccclxxxvi) ✓	(ccclxxxvii) ✓	(ccclxxxviii)	(ccclxxxix)

(clii) Sr. No.	(cliii) Activities/Use	(cliv) Phase I (clv) 2016-21	(clvi) Phase II (clvii) 2021-26	(clviii) Phase III (clix) 2026-31	(clx) Phase IV (clxi) 2031-36
(ccxc) g	(ccxc) Fire Station	(ccxcii)	(ccxciii) ✓	(ccxciv)	(ccxcv)
(ccxcvi) h	(ccxcvii) Banquet Hall	(ccxcviii)	(ccxcix)	(cd) ✓	(cdi)
(cdii) i	(cdiii) Mini-Secretariat at Inderpal Chowk	(cdiv)	(cdv) ✓	(cdvi)	(cdvii)
(cdviii) 6	(cdix) Utilities	(cdx)	(cdxi)	(cdxii)	(cdxiii)
(cdxiv) a	(cdxv) Public Drinking Water Coolers/ Water ATM	(cdxvi) ✓	(cdxvii) ✓	(cdxviii)	(cdxix)
(cdxx) b	(cdxxi) Public Toilets at strategic locations	(cdxxii) ✓	(cdxxiii) ✓	(cdxxiv)	(cdxxv)
(cdxxvi) c	(cdxxvii) Channelisation of Man Khad and Nallahs	(cdxxviii)	(cdxxix) ✓	(cdxxx) ✓	(cdxxxi) ✓
(cdxxxii) d	(cdxxxiii) Waste to Compost Plant	(cdxxxiv) ✓	(cdxxxv) ✓	(cdxxxvi)	(cdxxxvii)
(cdxxxviii) 7	(cdxxxix) Recreation al Spaces	(cdxl)	(cdxli)	(cdxlii)	(cdxliii)
(cdxliv) a	(cdxlv) Cluster/ Neighbourhood Parks	(cdxlv) ✓	(cdxlvii)	(cdxlviii)	(cdxlix)
(cdl) b	(cdli) City Park at SDM Office	(cdlii)	(cdliii) ✓	(cdliv)	(cdlv)
(cdlvi) c	(cdlvii) Development of Kharidi Ground in to a park	(cdlviii)	(cdlix) ✓	(cdlx)	(cdlxi)
(cdlxii) d	(cdlxiii) Development of Ramlila Ground	(cdlxiv)	(cdlxv) ✓	(cdlxvi)	(cdlxvii)
(cdlxviii) e	(cdlxix) Swimming Pools	(cdlxx)	(cdlxxi) ✓	(cdlxxii)	(cdlxxiii)
(cdlxxiv) f	(cdlxxv) Botanical Garden	(cdlxxvi)	(cdlxxvii)	(cdlxxviii) ✓	(cdlxxix) ✓
(cdlxxx) g	(cdlxxxi) Zoological Garden	(cdlxxxii)	(cdlxxxiii)	(cdlxxxiv) ✓	(cdlxxxv) ✓
(cdlxxxvi) 7	(cdlxxxvii) Residential	(cdlxxxviii)	(cdlxxxix)	(cdxc)	(cdxci)
(cdxcii) a	(cdxciii) Residential Sectoral Development	(cdxciv)	(cdxcv) ✓	(cdxcvi) ✓	(cdxcvii) ✓
(cdxcviii) 8	(cdxcix) Infrastructure	(d)	(di)	(dii)	(diii)
(div) a	(dv) Water supply	(dvi) ✓	(dvii) ✓	(dviii) ✓	(dix) ✓
(dx) b	(dxi) Sewerage	(dxii) ✓	(dxiii) ✓	(dxiv) ✓	(dxv) ✓
(dxvi) c	(dxvii) Strom water drains	(dxviii) ✓	(dxix) ✓	(dxx) ✓	(dxxi) ✓
(dxxii) d	(dxxiii) Solid Waste Management	(dxxiv) ✓	(dxxv) ✓	(dxxvi) ✓	(dxxvii) ✓
(dxxviii) e	(dxxix) Power	(dxxx) ✓	(dxxxi) ✓	(dxxxii) ✓	(dxxxiii) ✓
(dxxxiv) f	(dxxxv) Telecommunication	(dxxxvi) ✓	(dxxxvii) ✓	(dxxxviii) ✓	(dxxxix) ✓

15.3 Costing

The Plan envisages that the residential development is to be ensured by the land owners by subdivisions and Nagar Panchayat and Gram Panchayats through mechanism of 'Land Pooling and Reconstitution'. In case the "Land Pooling and Reconstitution" mechanism does not succeed, then land has to be acquired for implementation of the Development Plan Roads with width 6.00 metres and less will be developed by Nagar Panchayats and Gram Panchayat by raising funds from the beneficiaries. Roads with a width of 9.00 metres, 12.00 metres and 15.00 metres will be implemented by the PWD by raising development charges through implementation and realization of remunerative uses in the activity zones. However, the cost of arterial roads (18.00 metres) including bye passes, bulk water and electric supply will be borne by obtaining funds through plan allocation from the State Government and the same will be realized subsequently from the beneficiaries.

The cost of various infrastructure projects envisaged in the Development Plan accounts of about 291 crores.

This includes:

- Construction of new roads and road widening on proposed roads. Construction of storm-water drains along the roads.
- Construction of Water Treatment Plant and laying of water supply distribution network
- Construction of Sewerage Treatment Plant and laying of sewer network
- Augmentation of existing electric sub-station and laying of over-head electrical lines
- Street-lighting and telecommunication networking
- Solid waste management

The costing neither include land acquisition cost nor cost of construction of building. It is only cost of infrastructural works which would have to be borne by the developing agency

Table 0-1: Summary of Infrastructure Cost

S. No.	Description	Unit	Rate	Total Quantity	Total Amount
1	ROADS and PATHWAY				
1A	Asphalt Carriage Way 300mm GSB, 250mm WMM, 100mm DBM, 40mm BC	Sq. m.	3,300	145142.62	47,89,70,646
	SUB HEAD TOTAL				47,89,70,646
2	STORM WATER DRAINAGE				
2A	Rectangular Drains (RCC)	Met er	21,000	60719.00	1,27,50,99,000
2B	Culverts (RCC) Big	Met er	70,00,000	4.00	2,80,00,000
2C	Culverts (RCC) Road Crossings	Eac h	65,000	31.00	20,15,000
	SUB HEAD TOTAL				1,30,51,14,000
3	WATER SUPPLY				
3A	Potable Water Supply Distribution Network HDPE PE80 <300mmdia, 300mm>DI Pipes,	Met er	3,500	17926.04	6,27,41,140

Source: Estimation based on HP Schedule of Rates, PWD

Table 0-2: Phase-wise costing

[illegible]

1 A	Asphalt Carriage Way 300mm GSB, 250mm WMM, 100mm DBM, 40mm BC	761 55. 10	25,13, 11,83 0	206 94	6,82, 90,99 2	14 45 4	4,76, 99,42 1	338 39	11,16 ,68,4 03	47,89, 70,64 6
	SUB HEAD TOTAL		25,13, 11,83 0		6,82, 90,99 2		4,76, 99,42 1		11,16 ,68,4 03	47,89, 70,64 6
2	STORM WATER DRAINAGE									
3 A	Rectangular Drains (RCC)	226 13. 00	47,48, 73,00 0	110 21. 00	23,14 ,41,0 00	96 03. 00	20,16 ,63,0 00	174 82. 00	36,71 ,22,0 00	1,27,5 0,99,0 00
3 B	Culverts (RCC) Big	1.0 0	70,00, 000	1	70,00 ,000	1	70,00 ,000	1	70,00 ,000	2,80,0 0,000
3 C	Culverts (RCC) Road Crossings	11. 00	7,15,0 00	6.0 0	3,90, 000	5.0 0	3,25, 000	9.0 0	5,85, 000	20,15, 000
	SUB HEAD TOTAL		48,25, 88,00 0		23,88 ,31,0 00		20,89 ,88,0 00		37,47 ,07,0 00	1,30,5 1,14,0 00
4	WATER SUPPLY									
4 A	Potable Water Supply Distribution Network HDPE PE80 <300mmdia, 300mm>DI Pipes, S&S K-7	904 9.1 2	3,16,7 1,920	197 7.8 8	69,22 ,580	20 64. 91	72,27 ,185	483 4.1 3	1,69, 19,45 5	6,27,4 1,140
4 B	WTP			0.6	1,80, 00,00 0			0.6	1,80, 00,00 0	3,60,0 0,000
	SUB HEAD TOTAL		3,16,7 1,920		2,49, 22,58 0		72,27 ,185		3,49, 19,45 5	9,87,4 1,140
5	SEWERAGE									
5 A	Waste Water network RCC NP-3 internal lined pipes	904 9.1 2	5,20,3 2,440	197 7.8 8	1,13, 72,81 0	20 64. 91	1,18, 73,23 3	483 4.1 3	2,77, 96,24 8	10,30, 74,73 0
5 B	STP							0.5	1,75, 00,00 0	1,75,0 0,000
	SUB HEAD TOTAL		5,20,3 2,440		1,13, 72,81 0		1,18, 73,23 3		4,52, 96,24 8	12,05, 74,73 0
6	Solid Waste Management	100 0.0 0	30,00, 00,00 0							30,00, 00,00 0
6	Power and Telecommunications									
6 A	Augmentation of Gagaal Sub Station 33/11kV			1	3,50, 00,00 0					3,50,0 0,000
6 B	New 11kV OH Network	12. 025	72,45, 754			12. 02	72,45 ,754			1,44,9 1,507

						5				
6 C	L.V Network with Pole mounted Distribution Transformers					18.525	1,70,11,476	18.525	1,70,11,476	3,40,22,951
6 D	Street lighting on the existing OH Infrastructure	32.05	1,60,25,000							1,60,25,000
6 E	Telecommunications / Data Network Conduiting							15	37,50,000	37,50,000
	SUB HEAD TOTAL		2,32,70,754		3,50,00,000		2,42,57,229		2,07,61,476	10,32,89,458
	TOTAL		1,14,08,74,944		37,84,17,382		30,00,45,068		58,73,52,581	2,40,66,89,974
	Add for Misc. and unforeseen items		5,70,43,747		1,89,20,869		1,50,02,253		2,93,67,629	12,03,34,499
	Escalation (per annum)		8,38,54,308		2,78,13,678		2,20,53,312		4,31,70,415	17,68,91,713
	TOTAL (cost as on 2016)		1,32,83,14,506		49,51,51,929		38,56,15,091		70,14,13,576	2,91,04,95,102

Source: Estimated based on HP Schedule of Rates, PWD

15.4 Financing

The cost of residential development including road network, sewerage, drainage, electrification, parks, open spaces, parking, local convenient shopping etc., is to be borne by the land owners either themselves in respect of their land holdings or by way of land pooling and reconstitution mechanism in respect of small irregular holdings of different owners. The benefits likely to occur by way of sale of plots by virtue of enhancement of land values due to planned efforts would be more than sufficient to meet with the cost of development. On the basis of demarcation of plots in view of duly approved sub-division land pooling and reconstitution scheme by the Director, Town and Country Planning Department. Himachal Pradesh. The land owner may get advance from the likely purchasers for development purposes.

The two-organized commercial complex on 2.00 hectares of land are to be developed by the Nagar Panchayat/Cooperative Societies.

The Wholesale warehouse complex on 0.50 hectares is to be developed by the HP Marketing Committee.

The Truck parking in vicinity of the proposed Mandi is to be developed by the Nagar Panchayat/Gram Panchayat/PWD by raising funds from the beneficiaries in due course of time, by charged parking.

The HP Department of Industries/HP State Industrial Development Corporation will be responsible for development of industrial area.

Similarly, the respective Departments/ Government undertaking by raising resources from the beneficiaries will be responsible for development of utilities, facilities and services including water supply, sewerage, drainage electrification, telephone etc. at the town level.

The Government and Semi-Govt. offices are to be developed by the respective Departments either by raising their own resources or by obtaining funds from the Government.

Town and sector level parks may be developed by the Nagar Panchayat and Gram Panchayat by arranging land for the purpose.

15.5 Implementation

Besides landowners, Nagar Panchayat, and Gram Panchayats shall be responsible for creation of services land. However, overall control on implementation of proposals of Development Plan in terms of land use, zoning and sub-division regulations shall vest with the Director, Town and Country Planning Department, Himachal Pradesh. To assess achievements of each phase and to orient the Development Plan according to changing needs as well as to cater for unforeseen factors, it is envisaged to review this Plan after the completion of period of each phase.

In order to ensure inter-departmental coordination, a committee under the chairmanship of SDM, Nadaun is hereby recommended. It shall have following members:

1. S.D.M, Nadaun, Chairman
2. Tehsildar, Nadaun
3. Executive Engineer (B&R), H.P.PWD, Nadaun
4. Executive Engineer (I&PH), Nadaun
5. Executive Engineer (HPSEB), Nadaun
6. DFO, Nadaun
7. Pradhan, Nagar Panchayat, Nadaun
8. Executive Officer, MC, Nadaun
9. Regional Manager, HRTC, Hamirpur
10. Pradhans, Gram Panchayats in Nadaun Planning Area
11. Executive Engineer (NH)
12. Three Key NGO's or public representatives
13. Town and Country Planner, Hamirpur Member Secretary

The Committee may meet at least twice in a year and devise ways and means to ensure implementation of development plan proposals.

16

General Development Regulation, Building By-Laws and Procedure of Plan Sanction

16.1 Objective of Development Regulation and Building By-Laws

Regulations/Building Bye Laws are legal tools for development control used to regulate ground coverage, height, architectural design and construction aspects of buildings to achieve orderly development of an area. They are statutory in nature and serve to protect buildings against fire, earth quake, noise, structural failures and other hazards. They also safeguard appropriate indoor environment for inhabitants with natural light & ventilation. Regulations/Building Bye Laws also helps to avoid encroachments and protect the road right of way.

All mandatory regulations w.r.t. Development Plan/ Development Control Regulations regarding use, coverage, FAR, set-backs, open spaces, height, number of stories, number of dwelling units, parking standards etc., for various categories of buildings, including modifications therein, made from time to time, shall be applicable mutatis-mutandis in the Building Regulations as well. All amendments/ modifications made in these Regulations will automatically be included as part of the Development Control Regulations.

16.2 Jurisdiction of Regulations

These Regulations shall apply to the sub-division of land and building activities in the Nadaun Planning Area. The detail of Revenue Villages falling in Nadaun Planning Area is as under:

Table 0-1: Components of Nadaun Planning Area

Sr. No.	Name of the Revenue Village	Hadbast No.	Area (in Hectares)	Population 2011
1.	Nagarada (Nagar Panchayat)	18/20	72.84	4430
2.	Kot (Nagar Panchayat)	18/21	74.00	
3.	Dolee Gharan (Nagar Panchayat)	18/22	23.15	
4.	Seri (Nagar Panchayat)	19	61.48	
5.	DPF Kuthar	18	31.14	-
6.	Kuthar	18/24	45.83	356
7.	Bharmoti Kalan	18/25	98.65	526
8.	Jalari Saunkhlan	19/32	28.40	494
9.	Harmandir Mandiala	19/35	57.60	458
10.	Harmandir Rukwalan (Partially)	19/37	5.06	20
11.	Bela	19/38	193.94	2347
12.	DPF Tillu	19/39	87.10	46
13.	Tillu Pratham	19/39	13.32	335
14.	Tillu Khas	19/39	72.96	649
15.	Gagaal	19/40	31.92	251
Total			897.39	9912

16.3 Applicability of Regulations

Except hereinafter or otherwise provided, these Regulations shall apply to:-

- all new development and re-development of a plot,
- sub-division of land,
- erection and/or re-erection of a building
- and all building activities.

These Regulations shall be read in conjunction with the Himachal Pradesh Town and Country Planning Act, 1977 and the Himachal Pradesh Town and Country Planning Rules, 2014 as amended from time to time and shall be applicable for a period for which this Development Plan has been prepared, after which these shall be reviewed. Till such time the reviewed Regulations are notified, these will continue to be in force.

16.3.1 New Development and Re-development

Redevelopment is replacement of the existing built-up environment and enable co-creation of a new layout with enhanced infrastructure and increased density. These Regulations applies to the design, construction or re-construction and additions and alterations of new & existing buildings within the plot.

16.3.2 Part Construction

In case of part construction, where the whole or part of a building is demolished or altered or re-constructed, except where otherwise specifically stipulated, these Regulations shall apply only to the extent of the work involved.

16.3.3 Re-construction

The re-construction in whole or part of a building which has ceased to operate due to fire, natural collapse or demolition having been declared unsafe, or which is likely to be demolished, as the case may be, these Regulations shall apply.

16.3.4 Existing approved buildings

Nothing in these Regulations shall require the removal, alteration or abandonment, nor prevent continuance of the lawfully established use or occupancy of an existing approved building unless, in the opinion of the Competent Authority, such a building is unsafe or constitutes a hazard to the safety of adjacent property or to the occupants of the building itself.

16.4 Development Permission

Development or re-development shall carry out including sub-division on any plot or land (not forming part of any approved layout plan or scheme) after obtaining approval for the layout plan from the Competent Authority only.

15.5 Building Permission**16.5.1 Building Permission**

Any person intending to erect, re-erect or make addition/ alterations in any building or cause the same to be done shall first obtain appropriate building permission for each such building from the Competent Authority.

The following item of works are exempted from the above Regulation:

- (i) Plastering/cladding and patch repairs, except for the Heritage Buildings where Heritage Conservation Committee's permission is required.
- (ii) Re-roofing or renewal of roof including roof of intermediate floor at the same height.
- (iii) Flooring and re- flooring.
- (iv) Opening windows, ventilators and doors opening within the owners plot.
- (v) Rehabilitation/repair of fallen bricks, stones, pillars, beams etc.
- (vi) Construction or re- construction of sunshade not more than 0.75 Metre in width within one's own land and not overhanging over a public street.
- (vii) Construction or re-construction of parapet and also construction or reconstruction of boundary walls as permissible under Bye Laws.
- (viii) White washing, painting etc. including erection of false ceiling in any floor at the permissible clear height provided the false ceiling in no way can be put to use as a loft /mezzanine floor etc.

- (ix) Reconstruction of portions of buildings damaged by storm, rains, fire, earthquake or any other natural calamity to the same extent as existed prior to the damage as per sanctioned plan, provided the use conforms to provisions of Development Plan.
- (x) Erection or re-erection of internal partitions provided the same are within the preview of the Bye-laws.
- (xi) For erection of Lifts in existing buildings unless it does not affect the free movement.
- (xii) Change/ Installation/ re-arranging/ relocating of fixtures or equipments without hindering other's property/ public property shall be permitted.
- (xiii) Landscaping
- (xiv) Toilet/Washroom, Security Room, up to a maximum area of 9.00 M² only (permitted within setback area, provided it does not obstruct fire vehicles movement) in plot more than 3000 M².
- (xv) A Porta cabin up to 4.50 M² permitted within setback area, provided it does not obstruct fire vehicles movement.

16.5.2 Grant, Refusal and Deemed to be Sanctioned

If within the time limit stipulated in the Himachal Pradesh Town and Country Planning Act, 1977 as amended from time to time for various categories of buildings specified therein or the Competent Authority fails to intimate in writing to the person, who has applied for permission of its refusal or sanction or any intimation, the application with its plans and statements shall be deemed to have been sanctioned;

Provided that the fact is immediately brought to the notice of the Competent Authority in writing by the person; and

Subject to the conditions mentioned in these Bye-laws, nothing shall be constructed to authorize any person to do anything in contravention or against the terms of lease or titles of the land or against any other Regulations, Bye-laws or Ordinance operating on the site of the work.

In case the Competent Authority rejects the application due to any reasons, the applicant can re-submit the building plan along with fees and with compliances.

16.6 Already permitted buildings

Building permission issued by the Competent Authority before these Regulations come in to effect and where construction is in progress and has not been completed within the specified period from the date of such permission, the said permission shall be deemed to be valid and shall only be eligible for re-validation thereunder. Accordingly, where the validity of permission has expired, such construction shall be governed by the provisions of these Regulations. If the validity of permission has not expired and construction has not being started such applicants may revise the layout plan as per these regulations.

16.7 Procedure for obtaining Planning/Building Permission

16.7.1 Application

The application for development of land to be undertaken on behalf of the Union or State Government under Section 28 and under Section 29 by a Local Authority or any Authority specially constituted under the Himachal Pradesh Town and Country Planning Act, 1977 as amended from time to time shall be accompanied by such documents as prescribed under Rule- 14 of the Himachal Pradesh Town and Country Planning Rules, 2014. The application for development of land to be undertaken under Section 30 by any person not being the Union or State Government, Local Authority or any Authority specially constituted under the Himachal Pradesh Town and Country Planning Act, 1977 as amended from time to time shall be in such Form along with the Specifications Sheet and Schedule attached with these Forms and containing such documents and with such fee as prescribed under Rule 16 of the Himachal Pradesh Town and Country Planning Rules, 2014.

All the applications shall be made online. The procedure documents to be submitted online shall be as prescribed in the Himachal Pradesh Town and Country Planning web portal i.e., <http://tcp.hp.gov.in>

16.7.2 Documents Required

Apart from above, the applicant shall furnish the following additional documents namely:

16.7.2.1 Administrative Documents:









1. A copy of Ownership documents, i.e. latest original Jamabandi.
2. Latest original Tatima showing Khasra number of land in question, adjoining Khasra numbers from all sides of plot and width of the approach path/road. The land applied for shall be shown in red, in the Tatima.
3. Copy of Treasury Challan Form vide which requisite fee has been deposited.
4. To avail any compensatory benefits due to land acquisition for any public infrastructure a certificate from the Nagar Panchayat or Gram Panchayat or Competent Authority as the case may be, shall be enclosed in support of claim for compensatory benefits.

16.7.2.2 Technical Documents:

1. Location Plan in the Scale of 1:1000, with North direction indicating the land in question, main approach roads, important physical features of the locality/area, important public buildings like School, Hospital, Cinema, Petrol Pump etc. and surrounding ownership.
2. Site Plan in the scale of 1:200 with North direction indicating the proposed site, approach road, adjoining buildings, the existing and proposed utility infrastructure such as drainage and sewerage, water supply and power including the built-up area and open area clearly. Site must tally with the shape and dimensions of plot shown in the Tatima.
3. Building Plan showing floor plans, elevations and sections in the scale of 1: 100. The architectural drawings duly signed by the private professionals registered under Appendix-10 of Himachal Pradesh Town and Country Planning Rules 2014 as amended from time to time.

4. Recommended notation for colouring of plans: The site and building plans shall be coloured as specified in the table given below. Where items of work are not identified, the colouring notation used shall be indexed

Table 0-2: Colouring of Plans

Sr. No.	Item	Site/ Building Plan
1.	Plot lines	Yellow 
2.	Road/ Street/ Path	Black 
3.	Proposed building line	Red 
4.	Existing work (Outline)	Green 
5.	Work proposed to be demolished	Orange 
6.	Sewerage	Dark Brown 
7.	Water Supply/ RWH System	Sky Blue 
8.	Drainage	Dark Blue 

5. In the Site Plan, the horizontal distance of electricity line, from development as per Indian Electricity Rules, in case any electricity line is passing over or nearby the proposed site shall be shown.
6. A certificate from the Nagar Panchayat or Gram Panchayat or Competent Authority, as the case may be, shall be enclosed to claim compensatory benefit in support of taking over the land surrendered for development of road/ path/ public facility or amenities/ infrastructure. The land surrendered for development of Public Street/ Facility/ Infrastructure shall be registered by the Revenue Authority as Public Purpose. Provided that the applicant shall be compensated by allowing the Floor Area Ratio (FAR) on the surrendered land for public purpose.

Note- Total plot area shall also include the area surrendered for public purpose so that applicant shall not lose the FAR for any land surrendered in public interest by utilising that FAR on the remaining land.

7. The structural stability certificate and soil investigation report shall be submitted by the applicant on submission of planning permission case and at the time of completion of structure and before occupancy duly signed by the registered Structural Engineer as per Form -15 of the Himachal Pradesh Town and Country Planning Rules 2014 as amended from time to time.
8. The applicants shall not be insisted for submission of No Objection Certificate (NOC) from National Highway Authority of India (NHAI) or Himachal Pradesh Public Works Department (HPPWD) authorities. However, the Competent Authority shall ensure and coordinate with other related Authorities that building is sanctioned strictly as per the Regulations and facilitate single window clearance to the applicant. Applicant will submit his layout plan with clearly demarcated, acquired and controlled width etc.

16.8 General Regulations

The following General Regulations shall apply to all development activities in the Nadaun Planning Area: -

1. Maximum cutting of the natural ground profile shall not exceed more 3.50 Metre. However, in extra ordinary cases where hill cut or excavation is more than 3.50 meter site development Plan showing retaining/ breast wall etc. would be prepared/ designed by the Structural Engineer.
2. Maximum acceptable slope for development shall be 45 degrees.
3. Construction should be allowed on sandwiched plots without any kind of setbacks but projection shall not be allowed over the streets/roads.
4. Sky view impression on the ground should be such that nothing including projections and appendages such as AC outdoor units/sign bards etc. should project on the streets/ roads/ others' land.
5. Water, sludge and sewage should also not trickle on the streets or roads. Septic Tank and provision to lay out sewerage service line or connecting with the existing sewerage lines shall be mandatory.
6. The height of the room for human habitation shall not be less than 2.75 Metres measured from the surface of the floor to the soffit of the slab, provided that the minimum headway under any beam shall not be less than 2.40 Metres.
7. No boundary wall, fence and hedge along any yard or plot shall exceed 1.50 Metre in height.
8. On a corner plot bounded by a vehicular road in any land use zone or area, nothing shall be erected, placed, planted or allowed to grow in such a manner so as to materially impede vision to avoid accidents and smooth running of vehicular traffic.
9. No construction shall be allowed within 5.00 Metre distance from the existing forest or green belt boundary.
10. Minimum building width of 5.0 Metre be ensured after leaving setbacks. There will be No side setbacks in case of row housing.
11. There would be mixed land use in the entire Planning Area as per para 16.16 Zoning regulations. Hence, the change of Land use shall not be attracted if the proposed construction is a permitted activity in a particular land use zone..

16.8.1 Setbacks

1. Construction other than as is permissible under the Himachal Pradesh Roadside Control Act, 1972 as amended from time to time would not be allowed on the controlled width of National Highway Authority of India (NHAI) or Himachal Pradesh Public Works Department (HPPWD).
2. A Front set back of minimum 3.00 Meter shall be maintained from the controlled width. The controlled width can be allowed for parking purpose which has to be open to sky or temporary coverings.
3. The setbacks shall not be applicable to services like, all road side infrastructure/ facilities such as rain shelters, toilets, landscaping etc. Such temporary structures which are

specifically permitted by the Himachal Pradesh Public Works Department on the acquired width of a road should not touch the abutting properties.

4. In case of irregular plots or in case of site constraints, uniformity of setbacks shall not be insisted. In such case, the Competent Authority would consider the maximum ground coverage or minimum open area while approving such cases.
5. In open area of setback (other than controlled width) small temple, parking, porch, garage, swimming pool, septic tank, other services and steps up to plinth level would be permissible.

16.8.2 Building Height

16.8.2.1 Building Height

The building height shall be the vertical distance measured:-

- i. In the case of flat roofs from the plinth level to the highest point of the building.
- ii. In case of pitched roofs from the plinth level to the highest point up to the point where the external surface of the outer wall intersects the finished surface of the sloping roof.
- iii. In the case of gables facing the road midpoint between the eaves level and the ridge.
Where plinth level is the finished floor level of the floor just above the existing natural ground level.

16.8.2.2 Height Exemptions

The following structures shall not be considered in regulating the height of the building: -

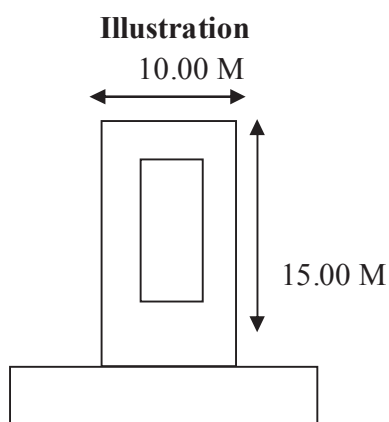
1. Roof tanks and their supports not exceeding 2.00 Meter in height.
2. Mechanical, electrical, HVAC, lift rooms and similar service equipment.
3. Staircase mumty not exceeding 3.00 Meter in height.
4. Architectural features serving no other function except that of decoration, chimneys, poles, parapet and other projections not used for human habitation, may extend beyond the prescribed height limits, not exceeding 1.50 Metre in height, unless the aggregate area of such structures exceeds 1/3rd of the roof area of the building on which these are erected.
5. Solar panels installed on the roof.
6. These height regulations shall not apply to the structures housing main seat of Deity /Sanctum / Sanctorum which are part of religious buildings e.g. Temples, Mosques, Gurudwaras, Churches, etc. provided it is so designed and approved by the Competent Authority. The height restrictions shall apply to the ancillary structures like dharamshala, sarai etc.

16.8.3 Ground Coverage and Floor Area Ratio

16.8.3.1 Definition and Illustration

The Floor Area Ratio (FAR) means the quotient obtained by dividing the total covered area (plinth area) on all floors multiplied by 100 by the area of the plot.

$$\text{FAR} = \frac{\text{Total covered area of all floors} \times 100}{\text{Plot Area}}$$



$$\begin{aligned} \text{Total Plot Area} &= 15.00 \text{ M} \times 10.00 \text{ M} \\ &= 150.00 \text{ M}^2 \end{aligned}$$

$$\begin{aligned} \text{Setbacks} \quad \text{Front} &= 2.00 \text{ M}, \\ \text{Left Side} &= 1.50 \text{ M} \\ \text{Right Side} &= 1.50 \text{ M} \\ \text{Rear} &= 1.50 \text{ M} \end{aligned}$$

$$\begin{aligned} \text{Built Up Area} &= 11.50 \text{ M} \times 7.00 \text{ M} \\ \text{(after leaving Setbacks)} &= 80.50 \text{ M}^2 \end{aligned}$$

$$\text{Covered Area on one floor} = 80.50 \text{ M}^2$$

$$\begin{aligned} \text{Open Area} &= 150.00 \text{ M}^2 - 80.50 \text{ M}^2 \\ &= 69.50 \text{ M}^2 \end{aligned}$$

$$\text{Floor Area Ratio (FAR)} = 1.75$$

$$\begin{aligned} \text{Total Built up Area} &= 150.00 \text{ M}^2 \times 1.75 \\ \text{(as per FAR)} &= 262.50 \text{ M}^2 \end{aligned}$$

$$\begin{aligned} \text{Therefore, Number of storeys} &= \frac{262.50 \text{ M}^2}{80.50 \text{ M}^2} \\ &= 3.26 \end{aligned}$$

$$\text{Number of storeys} = 3 \text{ storeys (say)}$$

16.8.3.2 FAR exemptions

The following shall not be included in covered area for FAR and Ground Coverage calculations:

1. Machine room for lift on top floor as required for the lift machine installation.
2. Rockery, lift/ lift well, escalator/ traveller well and well structures, plant nursery, water pool, swimming pool at any level (if uncovered), platform around a tree, water tank,

- fountain, bench, chabutara with open top and / or without enclosures, open ramps, compound wall, gate, slide swing door, fire staircase (without enclosure), fire towers, refuse area, fire control room, overhead water tank or top of building/ open shafts, cooling towers.
3. Mumty over staircase on top floor maximum 3.00 M height.
 4. Watch and ward cabins of total area not more than 4.50 M² and 6.00 M² with W/C each at entry and exit only, within the property line.
 5. Pergolas, sunshade elements and balconies with maximum 2 side enclosed.
 6. Plinth steps.
 7. Meter Room with HT/ LT panel, DG Room, AC Plant room, CC TV room/ Control room, Fire Control room and similar services area permitted in the setback and shall not be counted in FAR. Similarly Service area on habitable floors- like HVAC (Heating, Ventilation and Air Conditioning), MEP installations, Janitor Rooms, AHU Room, Electric room, LT Room, CCTV room, laundry or any other similar services and Building service shafts like electrical shafts, communication shafts, fire shafts MEP and HVAC shall not be from FAR.
 8. Entrance porch, veranda, canopies, covered Parking Area shall not be counted in FAR but shall account for ground coverage.
 9. Basement and any floor if used for parking, household storage and services. Basement area shall not extend beyond the ground coverage.

16.8.4 Basement or Cellar

Any storey of the building completely or partly below the natural ground level shall be considered as basement or cellar.

Construction of basement/ cellar shall not be counted as a storey and should be constructed within the prescribed setbacks and prescribed building lines and subject to maximum coverage on floor i.e. entrance floor and may be put for following uses:-

- i. storage of household or other goods of ordinarily combustible material.
- ii. strong rooms, bank cellars etc.;
- iii. air conditioning equipment and other machines used for services and utilities of the building and
- iv. parking spaces.

The basement/ cellar shall have following requirements:-

- i. All the walls shall be kept solid and without any openings; and below the natural ground level except the portion kept for ventilation purpose;
- ii. Every basement/ cellar shall be, in every part, at least 2.40 M in height from the floor to the underside of the roof slab or ceiling.
- iii. Adequate ventilation shall be provided for the basement/cellar and any deficiency in ventilation requirements may be met by providing mechanical ventilation in the form of blowers, exhaust fans and air conditioning system etc.;

- iv. The minimum clear height of the ceiling of any basement/cellar shall be 0.90 M and the maximum 1.20 M above the average surrounding ground level;
- v. Adequate arrangements shall be made such that surface drainage does not enter the basement/cellar;
- vi. The walls and floors of the basement/cellar shall be watertight and be so designed that the effects of the surrounding soil and moisture if any, are taken into account in design and adequate damp proofing treatment is given;
- vii. The access to the basement/cellar shall be separate from the main and alternative staircase providing access and exit from higher floor. Where the staircase is continuous in the case of buildings served by more than one staircase, the same shall be enclosed type, serving as a fire separation from the basement/cellar floor and higher floors. Open ramps shall be permitted, if they are constructed within the building line subject to the provision clause (v) above;

16.8.5 Regulations for Services

1. Septic Tank or connections with sewerage lines, where available shall be mandatory.
2. All Commercial/ Public and Semi -Public buildings above 15.00 Metres height shall have the provisions for elevators.
3. Firefighting provisions and specification shall be as per National Building code of India, 2016.
4. Risks and respective mitigations shall be planned by the competent authorities such as state Fire department and police to manage events and respond to natural disasters.
5. Distance from Electric lines- The distance in accordance with the Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010 as amended from time to time and as defined in National Building Code of India, 2016 is to be provided between the building and overhead electric supply line as under:-

Table 0-3: Clearances from Electric Supply Lines

Sr. No.	Type of Supply Line	Vertical Clearance	Horizontal Clearance
1.	Voltage lines and service lines not exceeding 650V	2.50 Metre	1.20 Metre
2.	High voltage lines above 650 Volts and including 11,000 Volts	3.70 Metre up to and including 33kV	1.20 Metre
3.	High voltage lines above 11,000 Volts and up to and including 33,000 Volts	3.70 Metre	2.00 Metre
4.	Extra high voltage lines additional 33,000 Volts	3.70 Metre plus 0.30 Metre for every additional 33,000 Volts or part thereof	2.00 Metre plus 0.30 Metre for every additional 33,000 Volts or part thereof

Source: NBC, 2016

16.9 Development Control Regulations**16.9.1 Residential Buildings**

The applicant must make sure the layout plan of residential building complies with following basic requirements:

- i. That there should be sufficient natural light and fresh air/ ventilation in the habitable area within the building, when constructed.
- ii. That there is protection against fire, noise, dust and pollution hazards.
- iii. That circulation and access is easy and safe from any accident point of view.
- iv. The minimum plot area, minimum setbacks and maximum FAR shall be as under:

Table 0-4: Residential Building Regulations shall be applicable in Nadaun Planning Area

Table 6 - W Residential Planning Regulations shall be applicable in Urban Planning Area								
Sl. No.	Description and Minimum Plot Area	Minimum Set Backs (in Meters)			Ground Coverage	Maximum Floor Area Ratio	Maximum Height in Meters	Max DUs/ Plot
		Front	Side	Rear				
I	Row Houses with common							
1	30 m ² up to 60 m ²	0.90	Nil	0.90	75%	1.80	6.00	2
2	Above 60 m ² up to 120 m ²	2.00	Nil	1.00	75%	1.80	9.00	3
II	Semi-detached Houses with common wall on one side							
1								
2	Above 120 up to 250 m ²	2.00	1.50	1.50	50%	1.50	12.00	3
III	Detached Houses							
1	Above 150 m ² up to 250 m ²	2.00	1.50	1.50	50%	1.75	21.00	4
2	Above 250 m ² up to 500 m ²	3.00	1.75	1.75	45%	1.75	21.00	4
3	Above 500 m ²	5.00	3.00	3.00	40%	1.75	21.00	4

Note:

1. *: In case of the smallest category of row housing i.e. 30 sq.m. – 60 sq.m, max 60% of each of the front and rear setback area shall be allowed for Ground Coverage. Max. 0.45M window projection shall be allowed in the setback area.
2. The entrance to the house shall be from the front setback area and none of the projections shall infringe on to the road ROW.
3. Sample Layout Plan for 30 sq.m. Row Housing building is given in Annexure 5.
4. The three storyed building shall be permitted in the Planning Area irrespective of FAR.

16.9.2 Non-Residential Buildings**16.9.2.1 Commercial Buildings:****1. Commercial Corridor**

There is commercial corridor on Nadaun-Jwalamukhi Road, Nadaun-Hamirpur Road and Nadaun Hoshiarpur Road in the Nadaun Planning Area. All developmental activities should strictly conform to the Regulations without any kind of relaxation in front open area. However, Norms of side setbacks can be relaxed, on the merit of case.

2. Market Area

There is dense market area. The already built up area in Nadaun market can be considered for in situ re-development. There won't be any consideration for setbacks in market, but height would be restricted to 12.00 Metres only.

3. Hotel Units, Lodges, Hostels, Guest Houses

- | | | |
|------|-------------------------|--------------------|
| i. | Minimum Plot Area | 500 M ² |
| ii. | Maximum Ground Coverage | 50% |
| iii. | Floor Area Ratio (FAR) | 2.00 |
| iv. | Maximum Height | 21.00 Metres* |

* Subject to seismic and structural stability

Note: 10% of the FAR can be used as commercial space/ convenient shopping.

4. Marriage Palaces

- | | | |
|------|-------------------------|---------------------|
| i. | Minimum Area | 2000 M ² |
| ii. | Maximum Ground Coverage | 30% |
| iii. | Floor Area Ratio (FAR) | 1.00 |
| iv. | Maximum Height | 15.00 Metres |

5. Community Centre

- | | | |
|------|-------------------------|---------------------|
| i. | Minimum Area | 1000 M ² |
| ii. | Maximum Ground Coverage | 50% |
| iii. | Floor Area Ratio (FAR) | 1.50 |
| iv. | Maximum Height | 15.00 Metres |

6. Petrol Pump

- | | | |
|-----|--|---------------------|
| i. | Plot Size | 1000 M ² |
| ii. | Front of the plot shall not be less than | 30.00 Metres |

Note: Petrol Pump shall not be allowed within the Nagar Panchayat boundary.

7. Shops

(a) Independent shop/ show rooms (standalone) above 10M² to 30 M²

- | | | |
|----|----------------|-------------|
| i. | Maximum Height | 6.00 Metres |
|----|----------------|-------------|

(b) Row shops with common wall on two sides above 30M² to 100 M²

- | | | |
|-----|------------------------|-------------|
| i. | Floor Area Ratio (FAR) | 1.75 |
| ii. | Maximum Height | 9.00 Metres |

(c) Row shops with common wall on two sides above 100M² to 250 M²

- | | | |
|-----|------------------------|--------------|
| i. | Floor Area Ratio (FAR) | 1.75 |
| ii. | Maximum Height | 18.00 Metres |

(d) Above 100M² to 250 M²

- | | | |
|-----|------------------------|--------------|
| i. | Floor Area Ratio (FAR) | 1.75 |
| ii. | Maximum Height | 18.00 Metres |

8. Shopping Complex

(a) 500 M² to 1500 M²

- | | | |
|-----|------------------------|--------------|
| i. | Floor Area Ratio (FAR) | 1.75 |
| ii. | Maximum Height | 18.00 Metres |

(b) Above 1500 M² to 4000 M²

- | | |
|---------------------------|--------------|
| i. Floor Area Ratio (FAR) | 1.75 |
| ii. Maximum Height | 18.00 Metres |

(c) Above 4000 M²

- | | |
|---------------------------|--------------|
| i. Floor Area Ratio (FAR) | 1.50 |
| ii. Maximum Height | 18.00 Metres |

16.9.2.2 Public-Semi Public Buildings

- | | |
|-----------------------------|--------------------|
| i. Minimum Plot Size | 500 M ² |
| ii. Maximum Ground Coverage | 40% |
| iii. FAR | 2.00 |
| iv. Maximum Height | 30 Metres* |
- * Subject to seismic and structural stability

9. Educational Facilities**(a) Nursery School**

- | | |
|----------------------------|----------|
| i. Maximum ground coverage | 33.33% |
| ii. Maximum FAR | 1.00 |
| iii. Maximum Height | 9 Metres |

(b) Primary School

- | | |
|----------------------------|-----------|
| i. Maximum ground coverage | 40% |
| ii. Maximum FAR | 1.20 |
| iii. Maximum height | 15 Metres |

(c) Higher Secondary School

- | | |
|----------------------------|-----------|
| i. Maximum ground coverage | 35% |
| ii. Maximum FAR | 2.00 |
| iii. Maximum height | 15 Metres |

(d) College

- | | |
|----------------------------|-----|
| i. Maximum ground coverage | 35% |
|----------------------------|-----|

Note:

1. In case of the above premises the total area of the plot shall be divided in-
 - (i) School/college building area
 - (ii) Play field area
 - (iii) Parking area
 - (iv) Residential and hostel area
2. The maximum ground coverage and FAR shall be calculated only on the areas meant for building.

16.9.3 Industrial Use:

The Regulations for Industrial use/activities shall be as per Regulations contained in Appendix-2 of the Himachal Pradesh Town and Country Planning Rules, 2014.

For Industrial use/activities, following Regulations shall be applicable:-

i. Minimum area of plot:

For small scale industry shall be 250 M² to 500 M².

(b) For services/light scale industry shall be 501 M² to 1000 M².

(c) For medium scale industry shall be 1001 M² to 5000 M².

(d) For large and heavy scale industry shall be above 5000 M².

(e) The plot area as mentioned in clauses (a) to (d) above would not be applicable in the cases where the sub-division of land has taken effect before the commencement of the Himachal Pradesh Town and Country Planning Rules, 2014.

The plot area as mentioned under clauses (a) to (d) above would not be applicable for the individual plots, if any, created/allotted by the Himachal Pradesh Industries Department and Himachal Pradesh State Industrial Development Corporation (HPSIDC) or any other Authority prior to coming into force of the Himachal Pradesh Town and Country Planning Rules, 2014.

The layout and design of industrial area, if any, shall be as per requirement of the Industry and shall be got approved from the Director.

ii. Height of floor/storey:

The minimum floor/ storey height of industrial building shall be 3.00 Metres and sloping roof height shall be in accordance with volume of the structure. In case of roof trusses, height of building should be adjusted /relaxed accordingly.

The plot area, minimum set-backs, maximum Floor Area Ratio (FAR) and maximum height of building shall be governed by following Table:

Table 0-5: For Industrial Uses

Sr. No.	Type of Industry	Plot area in M ²	Minimum Set Back in Metres				Max. FAR	Max. Height in Metres from Mean Sea Level up to 1000 M
			Front	Left	Right	Rear		
1.	Small Scale Industries	250 to 500	3.00	2.00	2.00	2.00	1.75	15.00
2.	Services/ Light scale Industries	501 to 1000	5.00	2.00	2.00	3.00	1.50	15.00
3.	Medium Scale Industries	1001 to 5000	10.00	5.00	5.00	5.00	1.25	20.00
4.	Large and Heavy Scale Industries	Above 5000	15.00	7.50	7.50	7.50	1.00	20.00

Note:-

(i) Minimum width of path/road abutting one side of plot shall be 5.00 M.

(ii) Service area required for pharmaceutical units or such type of Industries under requirement of Goods Manufacturing Practice (G.M.P) shall not be included for calculation of FAR, provided it is only used for utilities and services but not in any case for production.

(iii) For ancillary uses like security post/room shall be allowed in set-back area i.e. one wall shared with the boundary wall and shall be counted in the Floor Area Ratio (FAR).

16.9.4 Other Regulations

16.9.4.1 Other General Regulations

Regulations for Solar Passive Building Design, for Development of Barrier Free Environment for the Persons with Disabilities in Public and Semi Public Building & Re-creational Areas within the limits of Economic Capacity, for Rain Water Harvesting, for Development of Apartments and Colonies in Real Estate Projects and for Installation for Communication Towers shall be as prescribed in the Himachal Pradesh Town and Country Planning Rules, 2014.

16.9.4.2 Regulation for development of Information Technology Park (IT/Bio-Park)

The development of Information Technology Park shall be regulated as per Regulations contained in Appendix-3 of the Himachal Pradesh Town and Country Planning Rules, 2014.

16.9.4.3 Regulations Fire and Life Safety

The provisions of fire and life safety as enshrined in the National Building Code of India, 2016 shall be applicable to buildings having height of 15.00 Meter or above and having floor area more than 500 M² on any one or more floors and in case of Institutional Buildings it shall be applicable to the buildings having height of 9.00 Meter and above.

16.9.5 Relaxations

In the public interest and in the interest of town design or any other material consideration the Competent Authority may relax minimum size of plot, setbacks and Floor Area Ratio (FAR). The decision of the Competent Authority shall be final.

16.10 Special Area Regulations

16.10.1 Heritage Area

Heritage structures within Nadaun Planning Area shall be considered as per the regulations

The existing heritage buildings and structures within the Nadaun Planning Area shall be notified but not limited to those identified in the Development Plan. The Competent Authority shall be responsible for identifying such buildings. The historical structures as mentioned below within Nadaun planning area are of regional and local importance and should follow the Heritage area regulations mentioned below:

1. **Nadaun fort**
2. Other heritage structure of local importance namely
 - **Samadhi of Dhyanu Bhagat,**
 - **Baoli or Step Wells,**
 - **Paudiyan or Steps Ghats (Matta wali Paudiyan and Kaji Pattan Paudiyan)**

The following regulations shall be applicable in Heritage Areas, namely:-

1. The façade of the building/blocks shall be maintained in its pristine context in case of reconstruction of existing buildings, however the internal changes shall be undertaken after a thorough heritage audit of the structure.
2. In case of re-construction on old building lines, the existing plinth area, number of storeys and floor heights shall not be altered.

3. Constructions shall be permissible on the vacant sites subject to the condition that the height of such buildings does not exceed the height of surrounding heritage buildings and also does not obstruct the view in any way.
4. Sensitive reconstruction is permissible but only for buildings that are dilapidated/ structurally unsafe as certified by a Structural Engineer and corroborated by the Heritage Conservation Committee of the Himachal Pradesh. The reconstruction should not follow the prevailing byelaws but should be in such a manner which ensures that the building/ precinct character is not diminished.
5. The existing parks, green & open spaces shall be preserved/restored as such to enhance the historical structures & elements and integrate them in the new proposal with minimum alterations.

16.10.1.1 Restrictions on Development or Re-development in Heritage Areas

1. No development or redevelopment or engineering operation or additions / alterations, repairs, renovations including painting of the building, replacement of special features or plastering or demolition of any part thereof of the said listed buildings or listed precincts or listed natural feature areas shall be allowed except with the prior permission of the Competent Authority. Before granting such permission, the agency concerned shall consult the Heritage Conservation Committee appointed by the State Government and shall act in according with the advice of the Heritage Conservation Committee.
2. Provided that, before granting any permission for demolition or major alterations / additions to listed buildings (or buildings within listed streets or precincts), or construction at any listed natural features, or alteration of boundaries of any listed natural feature areas, objections and suggestions from the public shall be invited and shall be considered by the Heritage Conservation Committee.
3. Provided that, only in exceptional cases, for reasons to be recorded in writing, the Competent Authority may refer the matter back to the Heritage Conservation Committee for reconsideration. However, the decision of the Heritage Conservation Committee after such reconsideration shall be final and binding.
4. On the advice of the said Heritage Conservation Committee appointed by the Government and for reasons to be recorded in writing, the Competent Authority shall follow the procedure as per Himachal Pradesh Town and Country Planning Act, 1977 as amended from time to time to alter, modify or relax the Development Control Regulations prescribed in the Development Plan, if required, for the conservation or preservation or retention of historic or aesthetic or cultural or architectural or environmental quality of any heritage site.

16.10.2 Mixed Land Use along National Highways

For controlling linear mixed use development, the building use permissibility & accessibility to individual plots as well as large developments shall be governed as below:

1. In case of building line of the properties adjoining the main highway, a minimum distance between road and building from the edge of RoW shall be followed as mentioned in table below.

Table 0-6: Standards for building lines and control lines for Plain and Rolling terrain for Built-up area

Sr. No.	Classification of Road	Minimum Set-back from road boundary (meters)
1	National & state highways	3
2	Major district roads	3
3	Other district roads	3
4	Village roads	3

Source: IRC: 73-1980

- Any new access opening on the highway shall be duly permitted by Competent Authority.
- Essential highway amenities and services, namely, petrol pump, service station including emergency repair services, restaurants, parking lots, motels, police check-post, toll station, shall be permitted direct access from the National Highway crossing the Nadaun planning area boundary. Such access shall be provided with proper lay-by as per the guidelines specified by the Indian Road Congress or Competent Authority.
- Boundary walls, fences, advertisements, hedges, trees shall not cause obstruction of view for the road users.

Restrictions on structures between highway control lines and building line:-

The following activities shall not be allowed between-Right of Way of the National Highway and the permissible building line of the plots in subject:

- construct, form or lay out any means of access to, or from, a highway, or
- erect any building, or
- make or extend any excavation

16.10.3 Old Market Area (Pattan Bazar)

The development control regulations for the identified Pattan Bazar streets lying in the core urban area of Nadaun municipal boundary shall be followed as below:

- All whole sale shops with activities generating huge traffic, must be shifted to other low traffic impacting streets.
- Activities involving heavy vehicular movements like vehicle repair shops, whole sale shops, Godowns (specially gas Godowns), service and repair centre, noxious and hazardous wholesale trades, industrial activities, junk and scrap material shops, building material shops, automobile shops, ice factories shall be prohibited or relocated to low traffic impacting streets.
- The old market area as demarcated in the Development plan 2035 shall be governed by the restricted use of different modes of transport. Such restrictions should be in the form of time segregation and/or vehicle typology.
- Building heights to be restricted up to 12 m.

5. In case of redevelopment, the existing building line should be maintained.
6. All hawkers must be in the identified hawking zones as demarcated by the Competent Authority.
7. Shops and establishment signboards should follow the height strategy developed by the Competent Authority.

16.11 Risk Based Classification of Buildings

In order to mitigate any disasters, risk based buildings have been classified in three categories namely,-

1. High Risk Buildings
2. Medium Risk Buildings
3. Low Risk Buildings

Table 0-7: Risk Based Classification of Buildings for Nadaun Planning Area

Sr. No.	Risk	Buildings	Planning Permission Time *
1.	Residential Buildings		
(a)	High	Group Housing Schemes, above 3 Storey buildings, buildings on slopes more than 30°, any building raised on landfill, reclaimed land, buildings 2.00 M above the Highest Flood Level (HFL) up to a distance of 10.00 Metre, buildings with communication towers and buildings falling under the corridor of HT/LT lines.	Within 60 days.
(b)	Moderate	All 2-3 storey buildings, buildings on slopes above 15° and up to 30°.	Within 30 days.
(c)	Low	Single Storey Buildings Constructed On Slope Less than 15°.	Within 20 days.
2.	Commercial Buildings		
(a)	High	Commercial Shopping Complexes, Multiplexes, Tourism Units, Marriage palaces, Automobile Showrooms, any building raised on landfill, reclaimed land, buildings within the minimum setback from HFL as prescribed in respective DPs, buildings with communication towers and buildings falling under the corridor of HT/LT lines.	Within 60 days.
(b)	Moderate	Double storey shops	Within 30 days.
(c)	Low	Single storey shops	Within 20 days.
3.	Industrial Buildings		
(a)	High	Buildings above two storeys, any building above 10 meters height, any building raised	Within 60 days.

Sr. No.	Risk	Buildings	Planning Permission Time *
		on landfill, reclaimed land, buildings within the minimum setback from HFL as prescribed in respective DPs, buildings with communication towers and buildings falling under the corridor of HT/LT lines.	
(b)	Low	Single storey buildings of 10 meters or less than 10 meters height.	Within 20 days.
4.	Public and Semi-Public		
(a)	High	All buildings except for the buildings mentioned under Low Risk category	Within 60 days.
b)	Low	Toilets, rain shelters, pump houses and crematoriums.	Within 20 days.
5.	Mixed Land Use Buildings		
(a)	High	All buildings.	Within 60 days.

*: As amended from time to time by the State Govt.

Note:-

- i. The High Risk category of constructions will be supervised by the Registered Private Professionals and the Structural Safety Certificate & Design will be submitted by the Registered Structural Engineers.
- ii. The Moderate Risk and Low Risk Category buildings would be given fast track approval.

16.12 Monitoring of Construction

1. The applicant shall intimate in writing to the concerned competent authority that the work of execution of building has reached the plinth level. The competent authority shall inspect the executed work within 15 days and shall allow the applicant for further construction, only if the same is found in order.
2. In case the competent authority does not inspect the site within the prescribed period, the applicant shall certify that he has carried the construction up to plinth level in accordance with permission order and consequent upon not conducting the inspection within stipulated period, the applicant is undertaking the further construction in accordance with permission order.
3. If the competent authority on inspection later on observes at any stage that the work has not been carried in accordance with the approved plan, notice of unauthorized construction or deviation shall be served upon for restoration of the same to its original condition as prescribed in the Act or any other action as specified in Rules and Regulations thereunder.
4. The concerned competent authority, if required, may direct the applicant to revise the building plan as per requirement of Rules and Regulations and if it is found in order, the revised map shall be approved.
5. After completion of the building, the applicant shall submit a completion plan along with a certificate to the concerned competent authority certifying that the construction has been completed as per the approved map.
6. Building shall not be put to use prior to issuance of completion certificate by the competent authority.

16.13 No Change of Land Use

No Change of Land use shall be permitted for the Sericulture Land parcels as marked in the Development Plan, for any other activities which is not subservient to sericulture.

16.14 Regulations for Land Pooling and Re-constitution of Plots

1. On commencement of this Development Plan, no person shall be allowed to carve out plots of zig-zag 'Khasra' Numbers in his ownership and the same have to be organized along with other such adjoining parcels of land to ensure proper dimensioned plots to the purchasers, on one hand and in the interest of urban design, safety, economy, functionality, aesthetics and optimum use of land, on the other.
2. Land Pooling scheme shall be worked out on the basis of population and area required for facilities and amenities for the proposed population.
3. In a land pooling scheme, the land owners shall surrender a part of their land for circulation, public facilities and amenities i.e., Public Purposes as per the pooling percentage. The remaining land shall be made available to the land owners proportionate to their original plot areas.
4. The pooling percentage for a land pooling scheme shall be based on the formula below:

$$\text{Pooling \%age} = \frac{\text{Area required for Public Purpose}}{\text{Total Area of Land Pooling Scheme}}$$

Where area required for public purpose shall include road/path/circulation, infrastructural facilities and networks, parking, parks, open spaces, playgrounds and recreational pursuit.

5. In case of any person whose plot comes within the roads or community amenities, he shall be suitably relocated within the vicinity of the existing plot to the extent possible.

16.15 Sub-Division of Land Regulations

1. The Sub-Division of land into plots amounts to "Development" under the Himachal Pradesh Town and Country Planning Act, 1977 as amended from time to time. No person shall sub-divide his land unless permitted to do so in accordance with Rules and Regulations in force.
2. Similarly no Registrar or the Sub-Registrar shall register any sale deed or documents of any sub-division of land on share basis unless the sub-division of land is duly approved by the competent authority in accordance with provisions of the Himachal Pradesh Town and Country Planning Act, 1977 as amended from time to time and sub-division of land Regulations as contained in this Development Plan.
3. Natural Nallahs and Khads which passes through land/ land sub-division shall be developed and maintained according to discharge of water during the peak rainy season. The minimum distance of building from such Nallahs should be at least 3.00 Metre. The minimum distance of building from the bank of such Khads (i.e, Man Khad) should not be less than 5.00 Metre.
4. One side of every residential plot shall abut with minimum 3.00 M wide access road.

5. In case of plots or land abutting the existing or proposed roads or paths is of lesser width than required width, width of the same shall have to be increased to meet requirements of width for requisite plots.
6. Minimum width of plot shall be 4.00 M.
7. Any yard or plot existing at the time of coming into force of these Regulations shall not be reduced in dimension or area below the minimum requirement set forth herein. The yards or plots created after the effective date of these Regulations shall meet at least the minimum requirements established by these Regulations. All the plots registered prior to coming into force of these Regulations shall be treated as plots irrespective of their size subject to the condition that 3.00 Metre wide road abutting one side of the plot will be the basic requirement.
8. If 3.00 Metre wide road is not available at site and if it is less in width then the owner shall surrender the remaining width of the road ROW from his plot to make the road as 3.00 Metre wide. In such case the setback shall be considered from the revised ROW of the access road.
9. The construction would be allowed on hereditary owned smaller plots on and above 30 sq.m. i.e., minimum plot size for row housing as per Table 0-4.
10. If the plot size after sub-division is coming less than 30 sq.m., then the plot cannot be sub-divided further, however independent floors/strata division shall be allowed.
11. Regulations for the development of a Group Housing Scheme shall be governed by the Appendix-7 of the Himachal Pradesh Town and Country Planning Rules, 2014 'Regulations for Development of Apartments and Colonies in Real Estate Project'.
12. Where it is essential to develop a plot by cutting of natural land profile, it shall be the responsibility of the plot owner to provide retaining and breast walls, according to the engineering specifications, so that such cutting of natural profile shall not exceed more than 3.50 Metre in height.
13. Development proposal for a part of land or khasra no. shall be considered. However, proposal for complete land holding/khasra No. shall be submitted even if planning permission is required for part of the land provided further that at least one road of adequate width in view of total area of complete land holding/khasra No. shall have to be proposed to ensure access for balance area in conformity to following point.
14. The minimum width of road for sub-division shall be 7.00 m. However, in view of geographical constraints, width of road/ path may be relaxed to 3.00 m for maximum plot up to 5 in number. The minimum width of path/ road abutting one side of plot shall be 5.00 m to cluster of plots from 6 to 10 in number. For group of plots between 11 to 20 in number (2000 to 4000 sq.m.) on one particular access, the minimum vehicular access shall be 7.00 m wide. In case of plots exceeding 20 in number (more than 4000 sq.m.) the minimum width of road of road shall be 9.00 m.

16.16 Zoning Regulations

The land in the proposed Development Plan has been categorized into nine Land Use Zones:

- I. Residential Use Zone
- II. Commercial Use Zone
- III. Mixed Use Zone
- IV. Industrial Use Zone
- V. Public/Semi-Public Use Zone
- VI. Recreational Use Zone
- VII. Transport Use Zone
- VIII. Primary Activity Use Zone
- IX. Protected & Undevelopable Use Zone

16.16.1 RESIDENTIAL (R)

The activities Permitted, Restricted and Prohibited in Residential land use zone shall be as given below:

(a) Activities Permitted

Residence plotted (detached, semi-detached and row housing), Group housing, work-cum-residential, Hostels, boarding and lodging houses, Night shelters, guest houses, Educational buildings (nursery, primary, high school), Religious places, Neighborhood level social, cultural and recreational facilities with adequate parking provisions, Community halls, Convenience shopping, local (retail) shopping, Community centers, clubs, Auditoriums, Exhibition and art galleries, Libraries and gymnasiums, Health clinics, yoga centers, dispensaries, nursing homes and health centers (20 beds), Public utilities and buildings except service and storage yards, Electrical distribution depots and water pumping stations,

Nursery and green houses, Services for households (salon, parlors, bakeries, sweet shops, dry cleaning, internet kiosks etc.), Banks and professional offices not exceeding one floor, Bus stops, taxi stands, Police posts and post offices, Parks and tot-lots.

(b) Activities Restricted

Shopping centers, Village council, local council, state and central government offices, Colleges and research institutions, Petrol pump, Places of entertainment, cinema halls, restaurants and hotels, Markets for retail goods, IT and IT enabled services, Tourism related services, Motor vehicle repairing, Workshop, garages, storage of LPG cylinders, Burial grounds, Printing presses employing not more than 10 persons, Godowns /warehousing of non-perishables, Bus depots without workshop, Household industries (if the area for such use does not exceed one floor and there shall be no public display of the goods)

(c) Activities Prohibited

Heavy, large and extensive industries, Noxious, obnoxious and hazardous industries, Warehousing, storage godowns of perishables, hazardous, inflammable goods, Wholesale *mandis*, Junk yards, Workshops for buses, Slaughter houses, Hospitals treating contagious diseases, Sewage treatment plants and disposal sites, Water treatment plants, Solid waste dumping grounds, Outdoor and indoor games stadiums, Shooting range, Zoological garden, botanical garden, bird sanctuary, International conference centers and all uses not specifically permitted above.

16.16.2 COMMERCIAL USE (C)

The Commercial zone can be sub-divided into:

1. Retail Shopping Zone and General Business: C1
2. Hospitality/ Hotels/ Lodges: C2
3. Wholesale, Go-downs, Warehousing/ Regulated markets and Service Sector: C3

The activities Permitted, Restricted and Prohibited in Commercial land use zone shall be as given below:

(a) Activities Permitted

Retail and wholesale business, mercantile, commercial centres, Wholesale storage yards, Godowns, covered storage and warehousing, Banks, financial services and stock exchanges, Perishable goods markets, Business and professional offices, Private institutional offices and semi government offices,

Shops and shopping malls, Commercial services, Restaurants and hotels, Hostels, boarding houses, guest houses, Social and welfare institutions, Convenience and neighborhood shopping centres, Local shopping centres, weekly and formal markets, Bakeries and confectionaries, Cinema halls, theatres, banquet halls, auditoriums, Community halls, night shelters, Clinics and nursing homes, Petrol Pumps, IT and IT enabled services, Commercial institutes, Research and training institutes, Parking lots, Taxi stands, Two-wheeler stands.

(b) Activities Restricted

Associated residential uses, Warehousing, storage godowns of perishable, inflammable goods, coal, wood, timber yards, Non- polluting, non- obnoxious light industries, Junk-yards, Service centres, garages, workshops, Printing presses employing not more than 10 persons, 20 bedded hospitals not treating contagious diseases and mental patients, Weigh bridges, Gas installation and gas works, Colleges, polytechnics and higher technical institutes, Sports complex and stadiums, Transient visitor's homes, Places of entertainment, Recreational uses and museums, Convention centres, Religious places, Public Utilities, Telephone Exchanges, Police posts and post offices, Picnic Hut, Truck terminal, bus depots and parking.

(c) Activities Prohibited

Polluting industries, Heavy, extensive, noxious, obnoxious, hazardous and extractive industrial units, Hospitals, research laboratories treating contagious diseases, Poultry farms, dairy farms, slaughter houses, Sewage treatment plants and disposal sites, Solid waste treatment plants and dumping grounds, Agricultural uses, Storage of perishable and inflammable commodities, Quarrying of gravel, sand, clay and stone, Zoological gardens, botanical gardens and bird sanctuary, Sports training centres, Courts and all other related activities which may cause nuisance.

16.16.3 MIXED USE (M)

The activities Permitted, Restricted and Prohibited in Mixed land use zone shall be as given below:

(a) Activities Permitted

In the mixed use zone all activities falling within permitted land use (dominant land use) shall be minimum 60% and to co-exist with commercial, institutional and recreational which shall include Residential Plot- Plotted housing and Group housing, Residential-cum-work plot, Employees housing, Guest House, Boarding and Lodging houses, Hostel, Dharamshala and its equivalent, Night shelter, Local Level (Convenience/ Local Shopping Centre), Cinema/ Multiplexes, Post Offices, Parks and Playgrounds, Service industry, Road network with street furniture, Bus Stops, Taxi stand, Parking, Community hall/barat ghar, Community/ Recreational Hall, Library, Reading Room, Society Office, Creche and Day Care Centre, Nursing home/ Polyclinic/ Clinical Laboratory, Religious premises, Gymnasium, Yoga Centres, Banks, clubs, ATM, Police stations, Police post

(b) Activities Restricted

Activities related to non-polluting household industrial land use shall be allowed to a maximum of 10%.

(c) Activities Prohibited

All other activities especially industrial which are polluting in nature and which will have adverse impact on the overall activities of this zone.

16.16.4 INDUSTRIAL USE (I)

The activities Permitted, Restricted and Prohibited in Industrial land use zone shall be as given below:

(a) Activities Permitted

All kind of non-polluting industries, agro-based and household industries, Loading, unloading spaces, Warehousing, storage and depots of non-perishable and non- inflammable commodities, Cold storage and ice factory, Gas Godowns, Wholesale business establishments, Petrol filling station with garages and service stations, Bus terminals and bus depots and workshops, Parking, taxi stands, Residential buildings for essential staff and for watch and ward, Public utilities.

(b) Activities Restricted

Heavy, extensive and other obnoxious, hazardous industries subject to the approval of the Himachal Pradesh Pollution Control Board, Industrial Research Institute, Technical Educational Institutions, Junkyards, sports/ stadiums/ playgrounds, Sewage disposal works, electric power plants, service stations, cemeteries, Govt. semi-govt., private business offices, Banks, financial institutions and other commercial offices, Agro-based industries, dairy and farming, Gas installations and gas works, Workshops garages, Hotels and guest houses, Hospitals and medical centres.

(c) Activities Prohibited

General business unless incidental to and on the same site with industry, Schools and colleges, Hotels, motels and caravan parks, Recreational sports or centers, Other non-industrial related activities, Religious buildings, Irrigated and sewage farms, Major oil depot and LPG refilling plants, Social buildings and all uses not specifically permitted above.

16.16.5 PUBLIC AND SEMI-PUBLIC USE ZONE (PS)

The Public and Semi Public use zone can be sub divided into:

1. Govt./ Semi Govt. / Public Offices: PS 1
2. Educational and Institutional: PS 2
3. Medical and Health PS 3
4. Heritage and Socio-Cultural: PS 4
5. Utilities and Services: PS 5

The activities Permitted, Restricted and Prohibited in Public and Semi Public use zone (PS - 1 to PS - 5) shall be as given below:

(a) Activities Permitted

Government offices, central, state, local and semi-government, public undertaking offices, Universities and specialized educational institutions, colleges, schools, research and development centres, Social and welfare centres, Libraries, Hospitals, health centres, dispensaries and clinics,

Social and cultural institutes, Religious buildings, Marriage halls, community halls, Conference halls, Museums, art galleries, exhibition halls, auditoriums, Police stations, police lines, jails, Local state and central govt. offices uses for Defence purpose, Educational and research institutions, Social and cultural and religious institutions, Local village council facilities, Uses incidental to govt. offices and for their use, Monuments

(b) Activities Restricted

Residential flats, residential plots for group housing and staff housing, IT services , Hostels, transit accommodation, Entertainment and recreational complexes, Nursery and kindergarten, welfare centre, Open air theatre, playground, Residential club, guest house, Truck terminals, helipads , Parking areas, taxi stands, two-wheeler stands

(c) Activities Prohibited

Heavy, extensive and other obnoxious, hazardous industries, Slaughterhouses, Junkyard, Wholesale *mandis*, Dairy and poultry farms, farmhouses, Workshops for servicing and repairs, Processing and sale of farm products and all uses not specifically permitted above

Utilities and Services: PS-6

(a) Activities Permitted

Post offices, Telegraph offices, public – utilities and buildings, Water Treatment Plant, Sewage Treatment Plant, Solid waste Treatment Plant solid waste dumping grounds, Radio transmitter and wireless stations, telecommunication centres, telephone exchange, Water supply installations, Sewage disposal works, Service stations, Cemeteries/burial grounds and cremation grounds, Power plants/ electrical substation, Radio and television station, Fire stations

(b) Activities Restricted

Service industry, Warehouse/storage godowns, Health centre for public and staff or any other use incidental to public utilities and services, Information/Payment kiosk, Incidental/ancillary residential use, Truck terminals, helipads, Commercial uses centre

(c) Activities Prohibited

Any building or structure which is not required for uses related to public utilities and activities is not permitted therein. Heavy, extensive and other obnoxious, hazardous industries and all uses not specifically permitted above.

16.16.6 RECREATIONAL USE ZONE (R)

The activities Permitted, Restricted and Prohibited in Recreational Use Zone shall be as given below:

(a) Activities Permitted

Regional parks, district parks, playgrounds, Botanical/zoological garden, Bird sanctuary, Clubs, stadiums (indoor), outdoor stadiums with/ without health centre for players and staff, Picnic huts, holiday resorts, Shooting range, Sports training centres, specialized parks/*maidans* for multiuse, swimming pool, Special recreation and special educational areas, Library, public utilities.

(b) Activities Restricted

Building and structures ancillary to use permitted in open spaces and parks such as stand for vehicles on hire, taxis and scooters, bus and railway passenger terminals, Facilities such as police post, fire post, post and telegraph office, Commercial use of transit nature like cinema, circus and other shows, Public assembly halls, Restaurants and caravan parks, Sports stadium, open air cinemas

(c) Activities Prohibited

Any building or structure which is not required for open air recreation, dwelling unit except for watch and ward personnel and uses not specifically permitted therein.

16.16.7 TRANSPORT USE ZONE (T)

The activities Permitted, Restricted and Prohibited in Transport use zone shall be as given below:

(a) Activities Permitted

All types of roads, Rail terminal, goods terminal, circulations, Bus stops and Bus and Truck terminals

Taxi stands, Parking areas, Filling stations, Transport offices, booking offices, Night shelter, boarding houses, Banks, Restaurants, Workshops and garages, Automobile spares and services, Godowns, Loading and unloading platforms (with/without cold storage facility), weigh bridges, Ware houses, Storage depots, Utility networks (drainage, sewage, power, tele-communications)

(b) Activities Restricted

Way side shops and restaurants, Authorized/Planned Vending areas, Incidental/ancillary residential use, Emergency health care centre, Tourism related projects, All ancillary (complimentary) uses for above categories (subject to decision of the Authority)

(c) Activities Prohibited

Use/activity not specifically related to transport are not permitted herein and all uses are not specifically permitted as above.

16.16.8 PRIMARY ACTIVITY USE (PA)

Primary Activity can be sub divided into

1. Agriculture: PA 1
2. Plantation: PA 2
3. Forest: PA 3

The activities Permitted, Restricted and Prohibited in Primary Activity zone shall be as given below:

(a) Activities Permitted

Dwelling for the people engaged in the farm (rural settlement), Farm-houses and accessory buildings, Agriculture, horticulture and forestry, poultry, piggeries and dairy farm, Cottage industries, storage, processing and sale of farm produce, Petrol and other fuel filling stations, Fishing, Public utility and facility buildings.

(b) Activities Restricted

Farm houses, Extensive industry, brick kilns, Sewage disposal works, Electric power plant, Quarrying of gravel, sand, clay or stone, Service industries accessory to obnoxious and hazardous industries, School and library and religious buildings.

(c) Activities Prohibited

Residential use except those ancillary uses permitted in agricultural use, Heavy extensive, noxious, obnoxious and hazardous industries, any activity which is creating nuisance and is obnoxious in nature.

16.16.9 PROTECTED AND UNDEVELOPABLE USE ZONE (E)

The protective and undevelopable use zone shall be sub divided into

1. Water bodies: E1
2. Protected Forest: E2
3. Green Belt/Buffer: E3
4. Undevelopable use zone: E4

1. Water bodies**(a) Activities Permitted**

Rivers, canals, Streams, water spring, Ponds, lakes, Reservoir, Water Catchment Area

(b) Activities Restricted

Fisheries, Boating, water theme parks, water sports, lagoons, Any other use/activity incidental to Water Bodies Use is permitted.

(c) Activities Prohibited

Use/activity not specifically related to Water Bodies Use not permitted herein. All uses not specifically permitted above.

2. Protected Forest:**(a) Activities Permitted**

Agro and Social forestry, Felling or removing trees or timber or other forest-produce from such forests for their own use for the purposes of trade.

(b) Activities Restricted

Cutting, sawing and conversion, Removal of trees and timber, Collection, manufacture and removal of forest-produce, from protected forests.

(c) Activities Prohibited

Any kind of development residential, industrial or commercial, Quarrying of stone, Burning of lime or charcoal, Collection or subjection to any manufacturing process, or removal of, any forest-produce in any such forest, Breaking up or clearing for cultivation, for building, for herding cattle or for any other purpose, of any land in any such forest.

3. Undevelopable use zone:

Undevelopable use zone shall be identified as all earthquake/landslide prone, cliffs and environmentally hazardous area, areas adjacent to fault lines, areas with slope higher than 45 degree (NBC), flood plain and other areas identified by State Disaster Management Authority and all the environmentally sensitive areas.

(a) Activities Permitted

Afforestation

(b) Activities Restricted

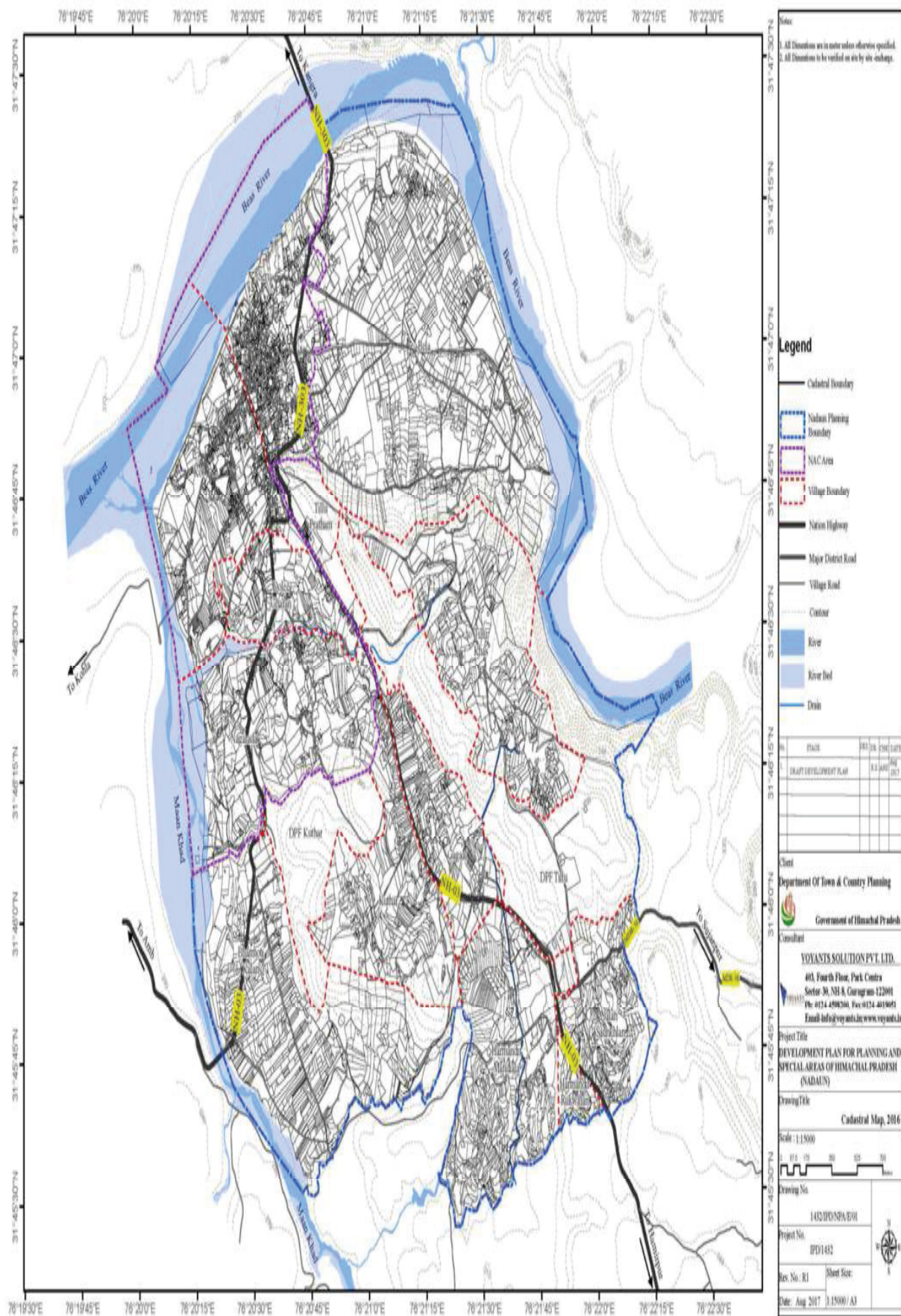
Quarrying of gravel, sand, clay or stone, Check dam to store water after clearance from the authority, Special outdoor recreations

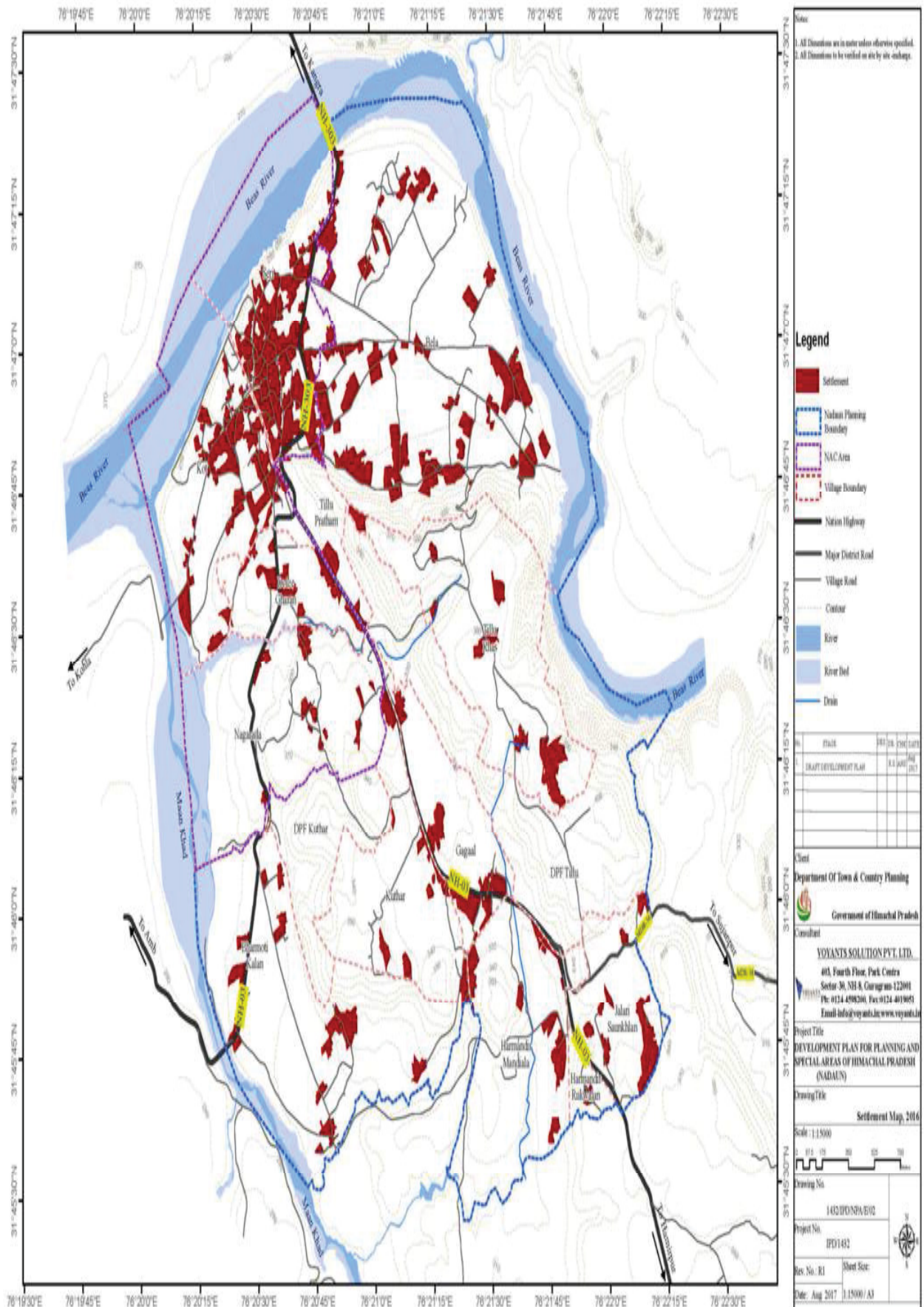
(c) Activities Prohibited

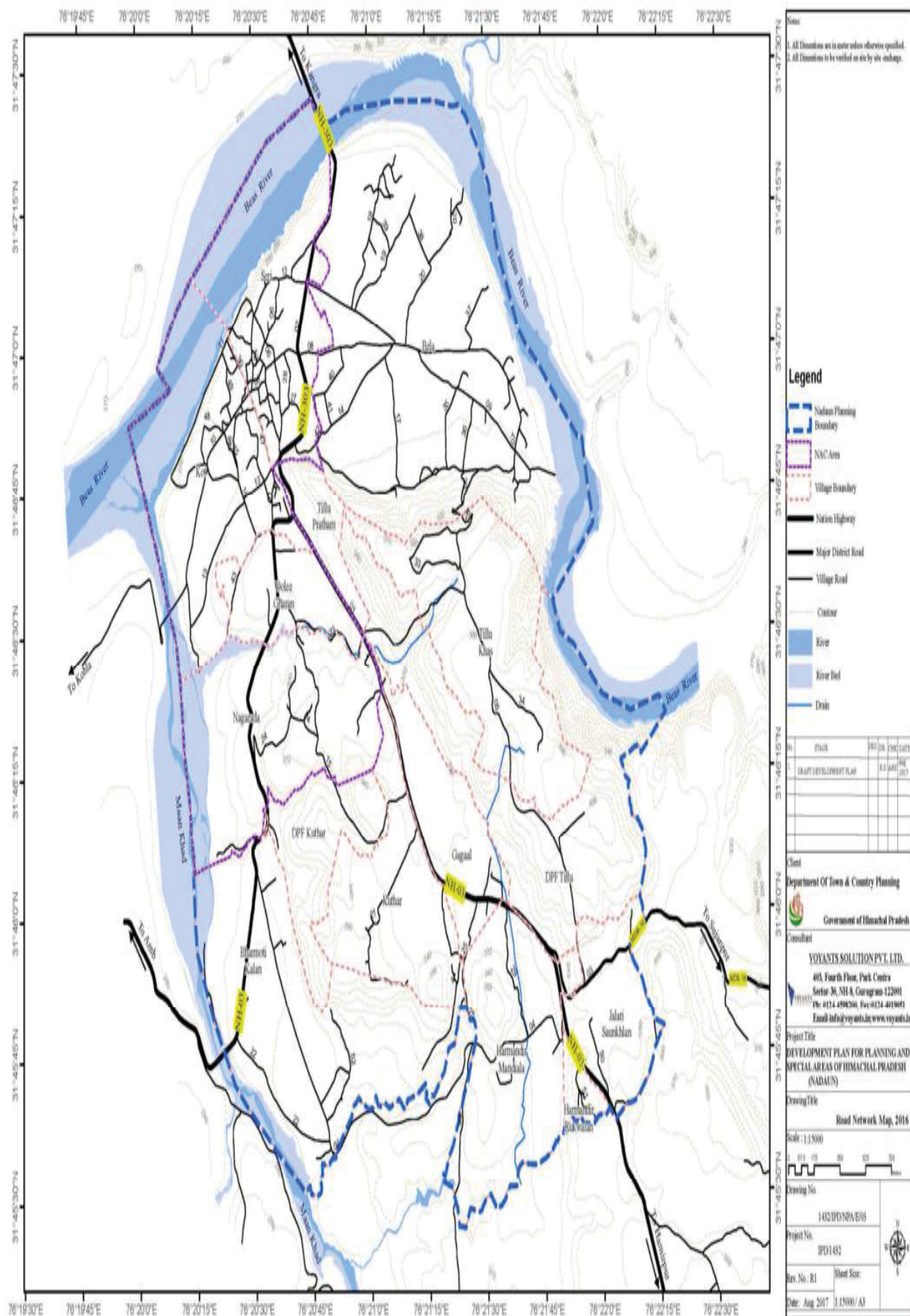
All uses not specifically permitted above

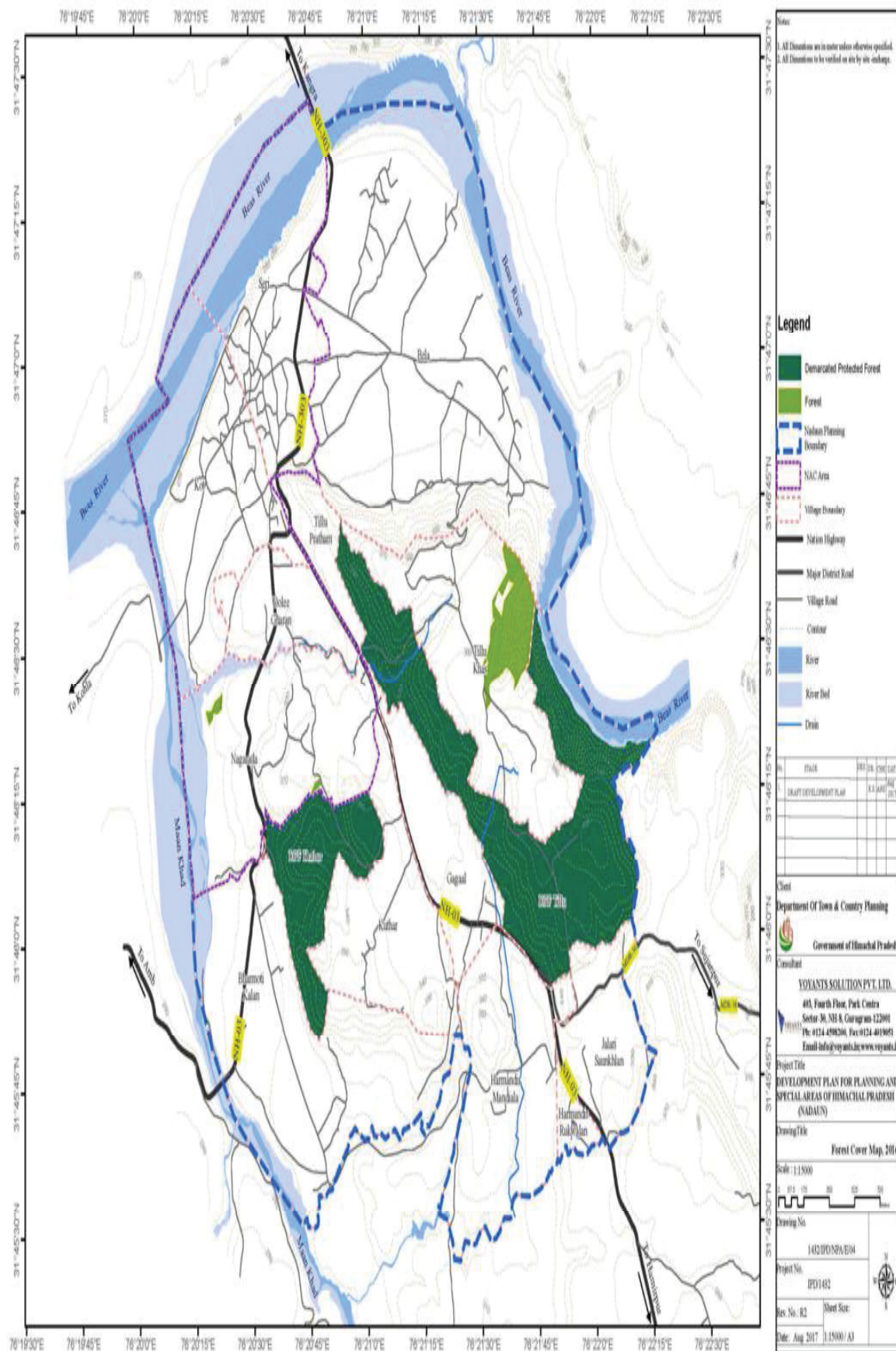
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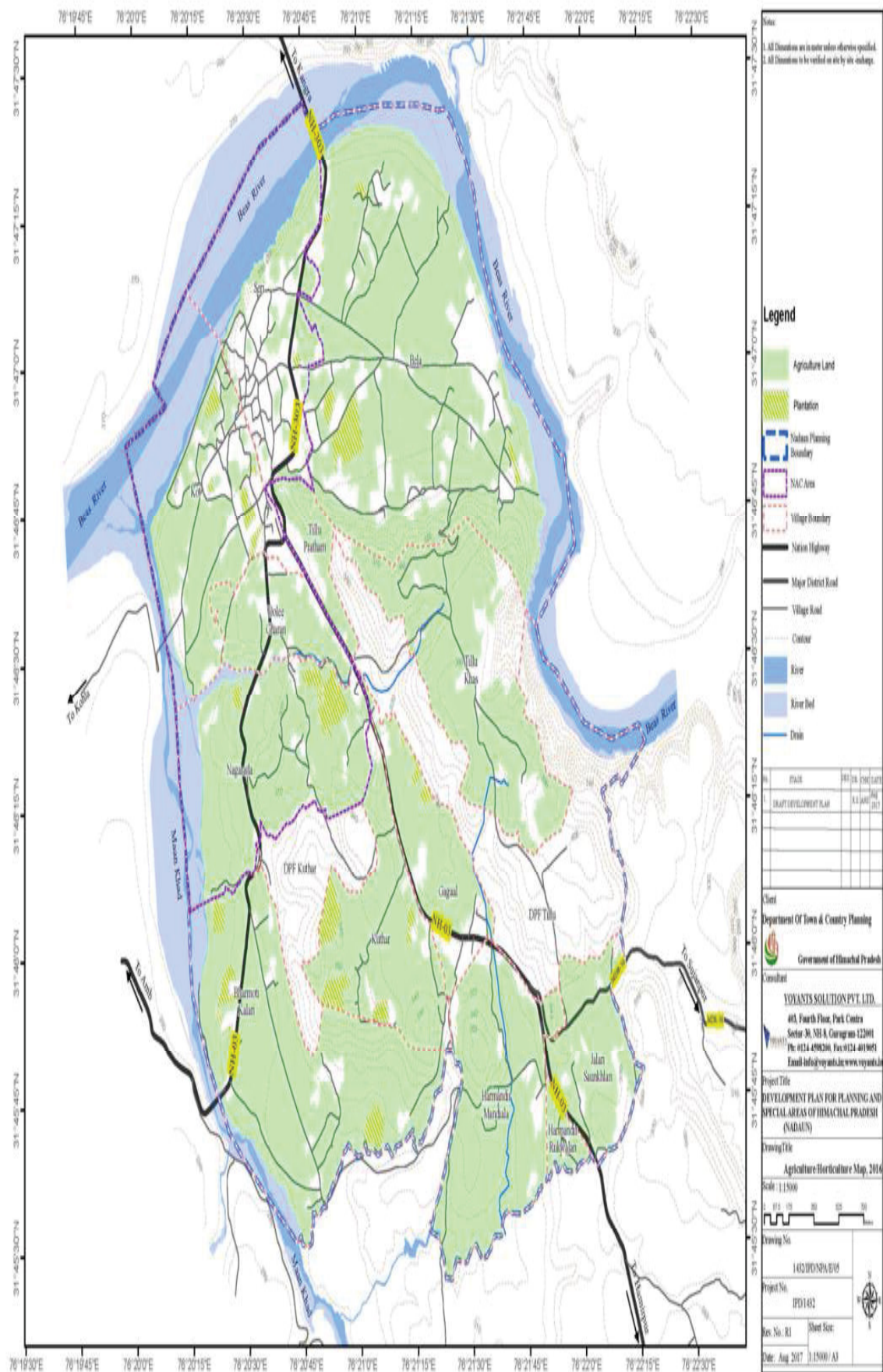
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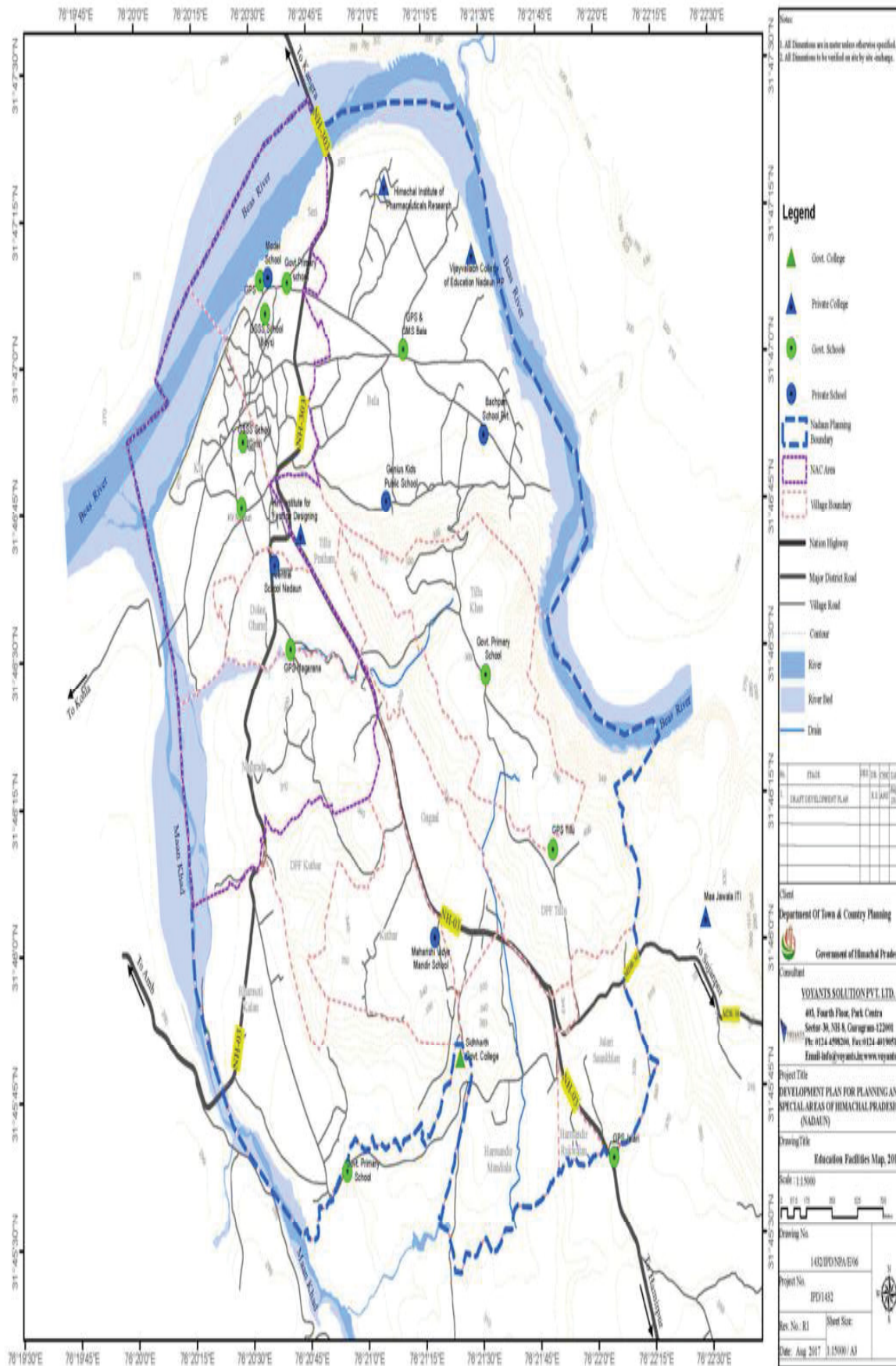


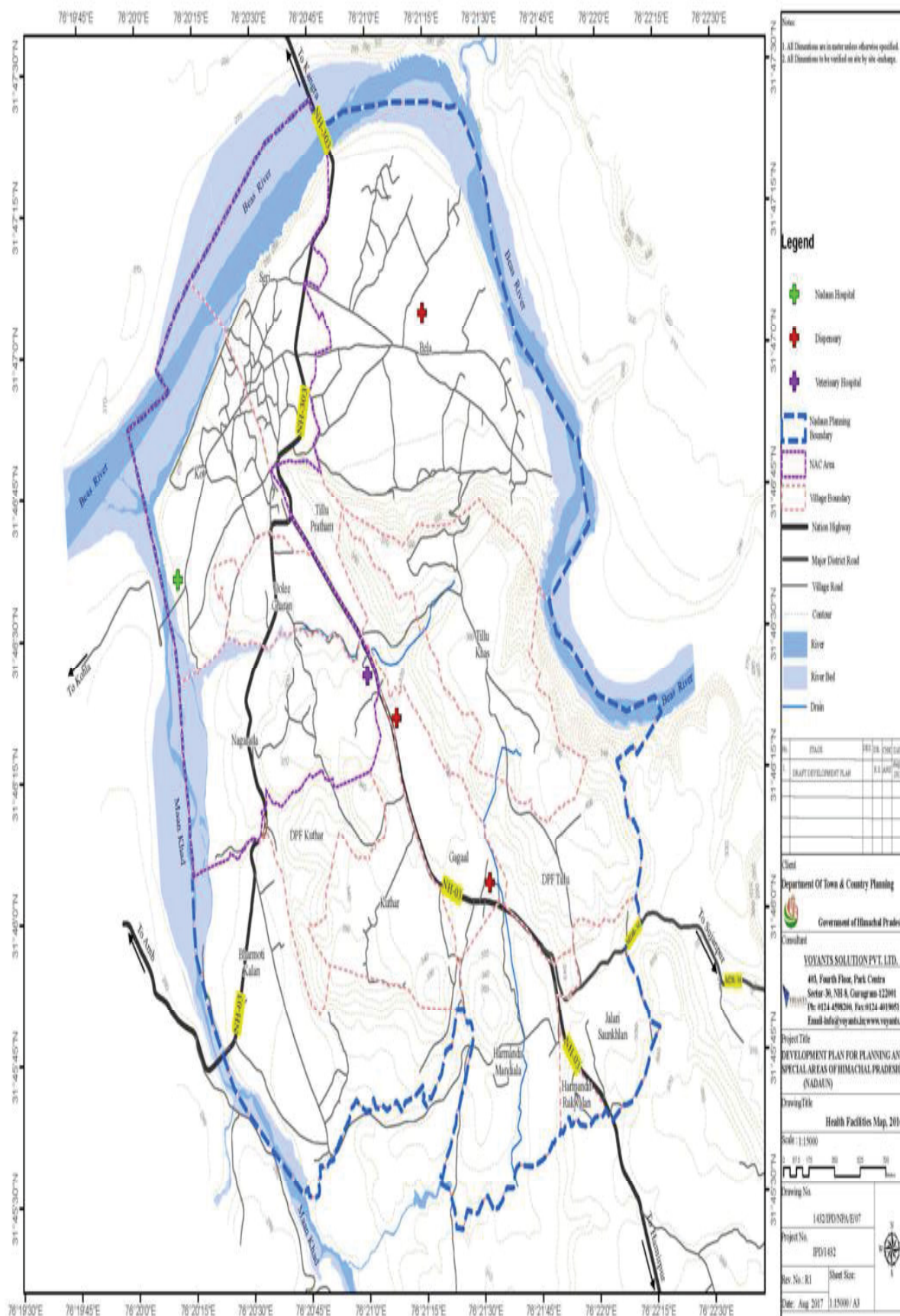


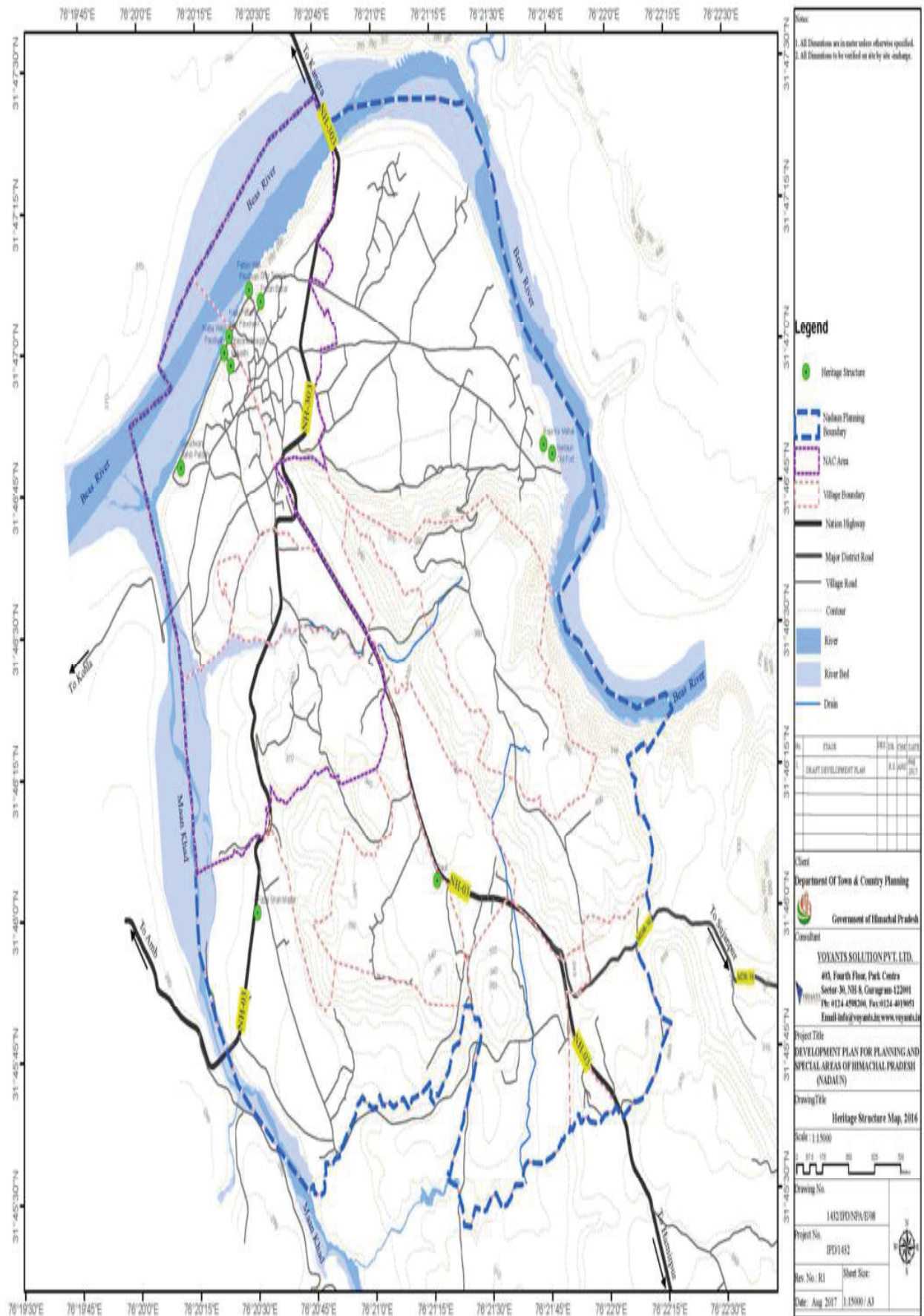


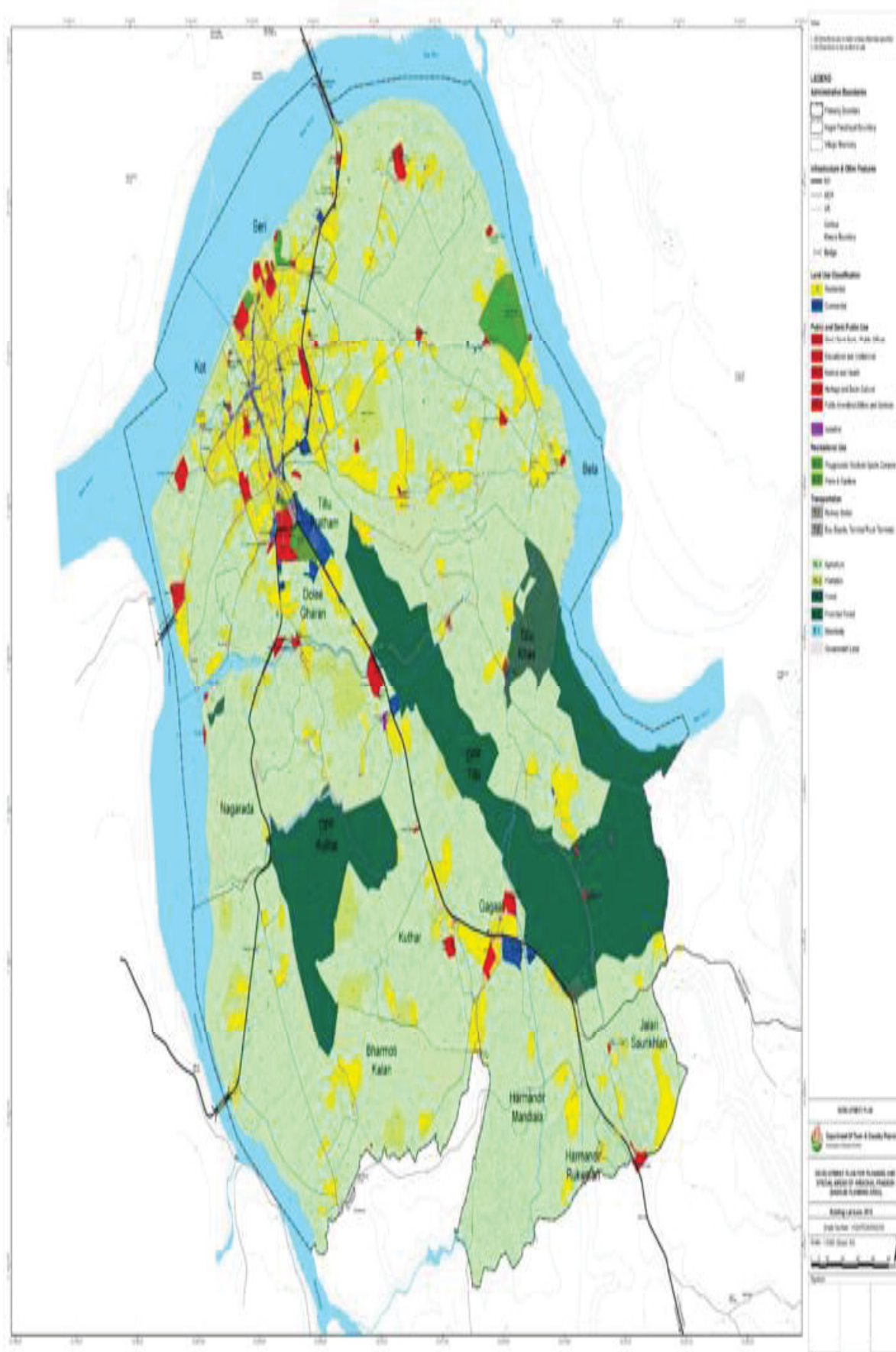


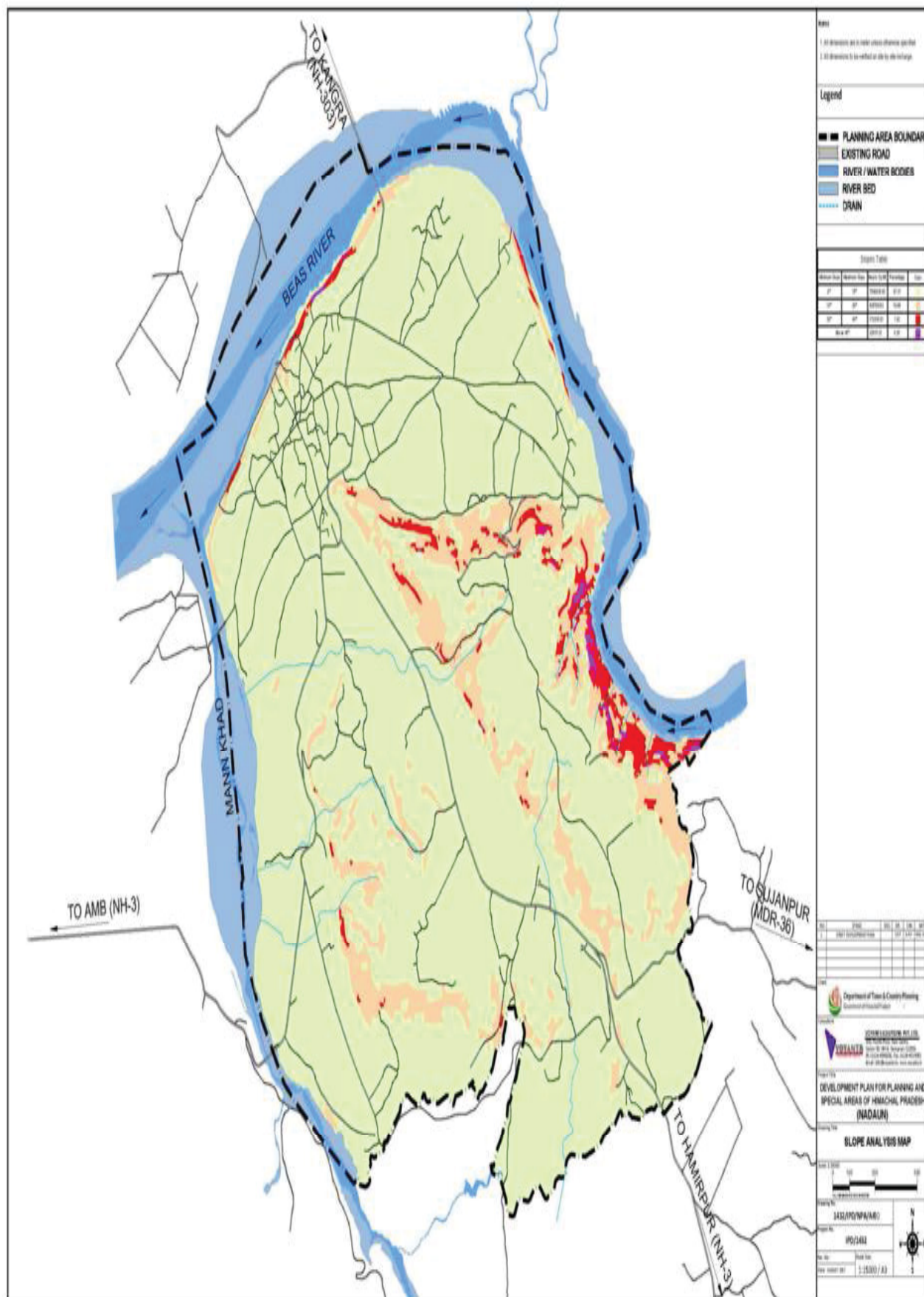


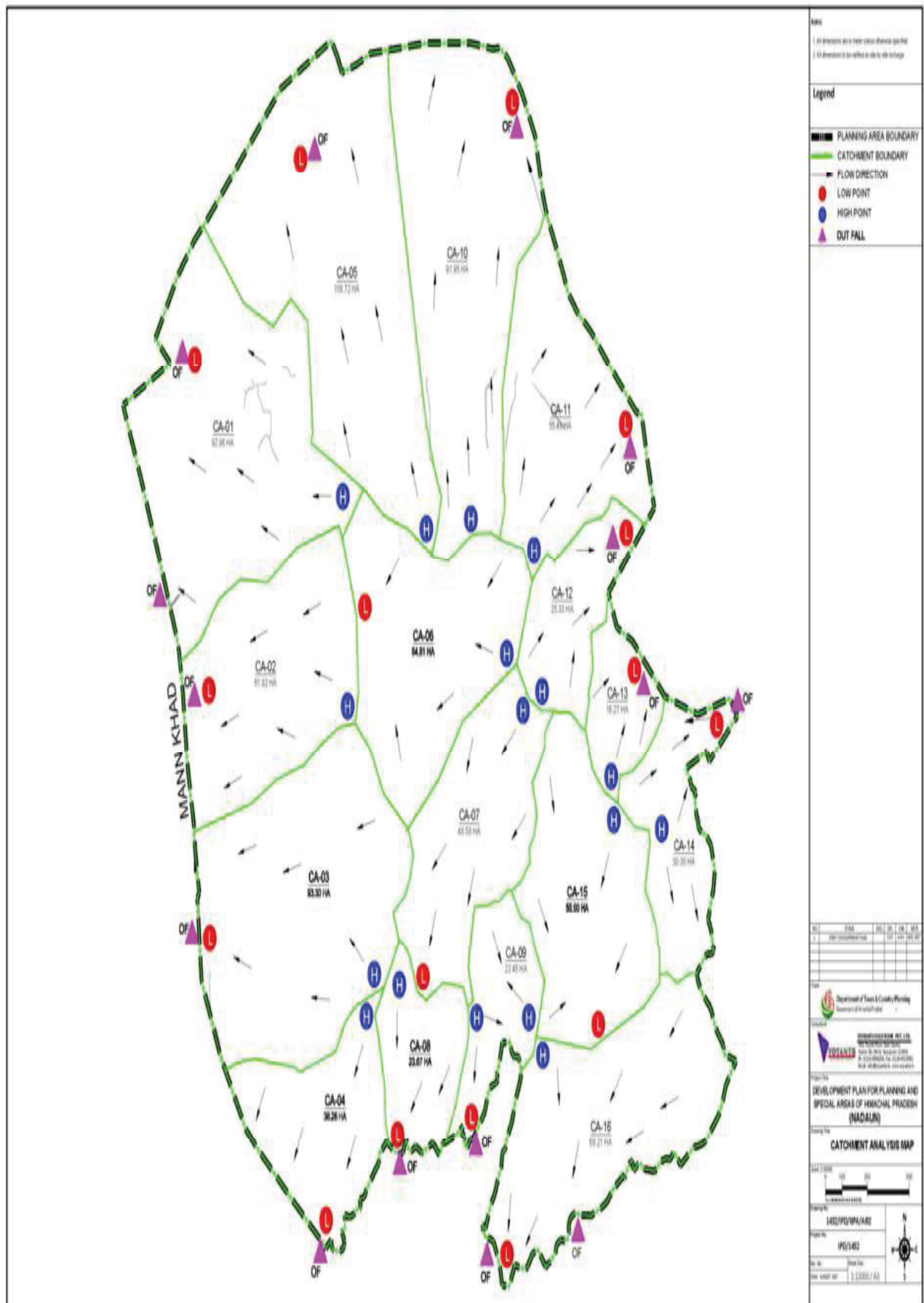


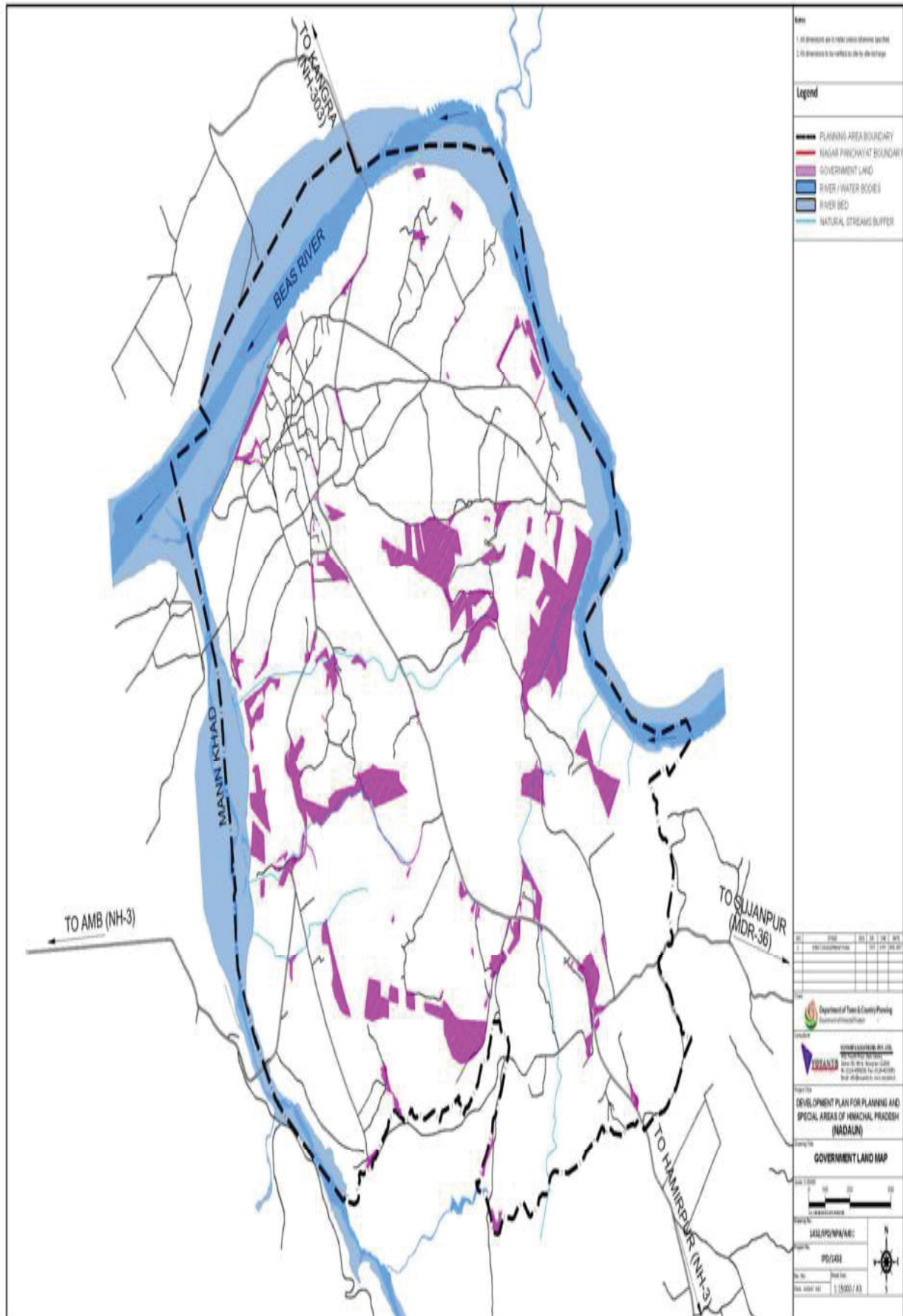


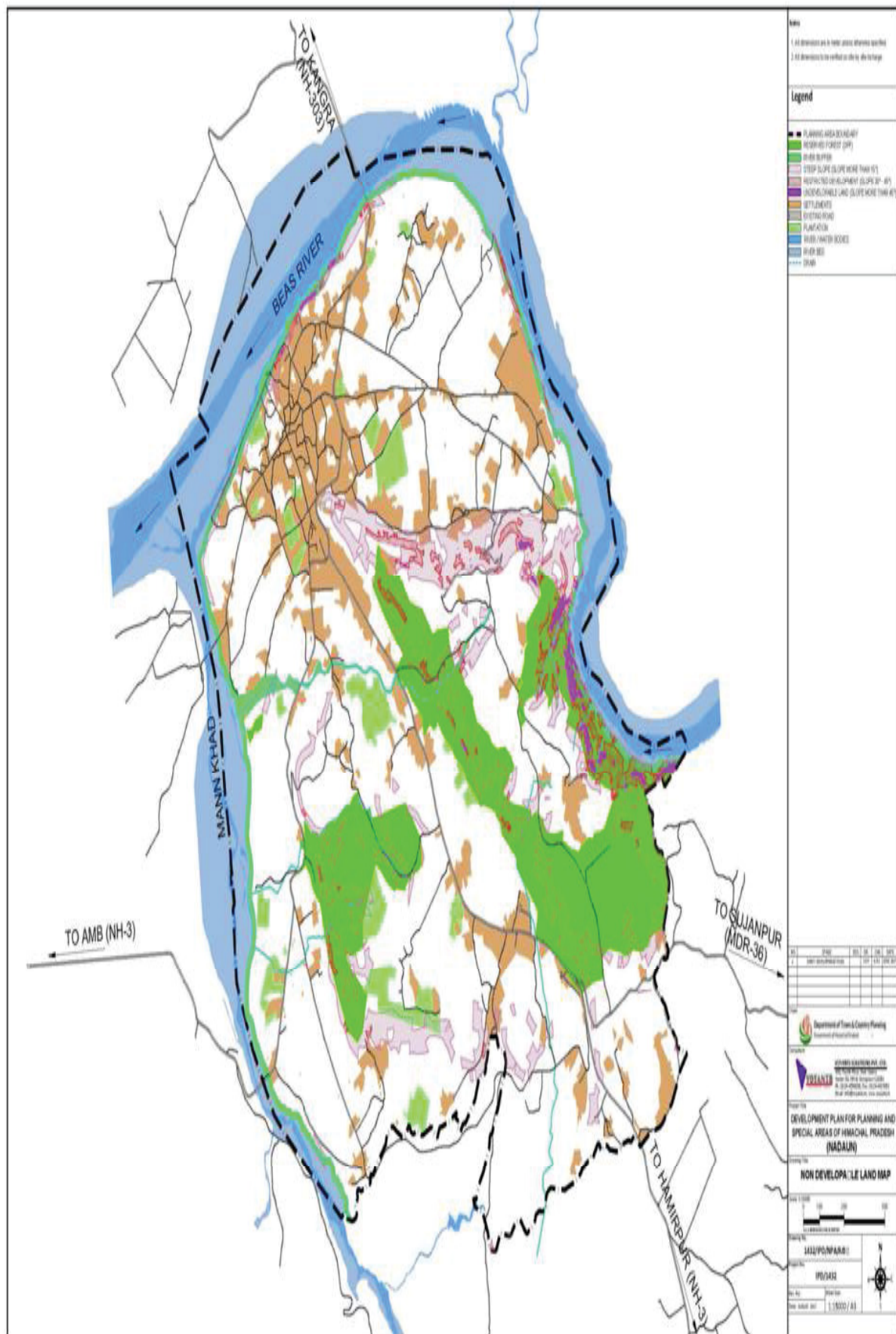


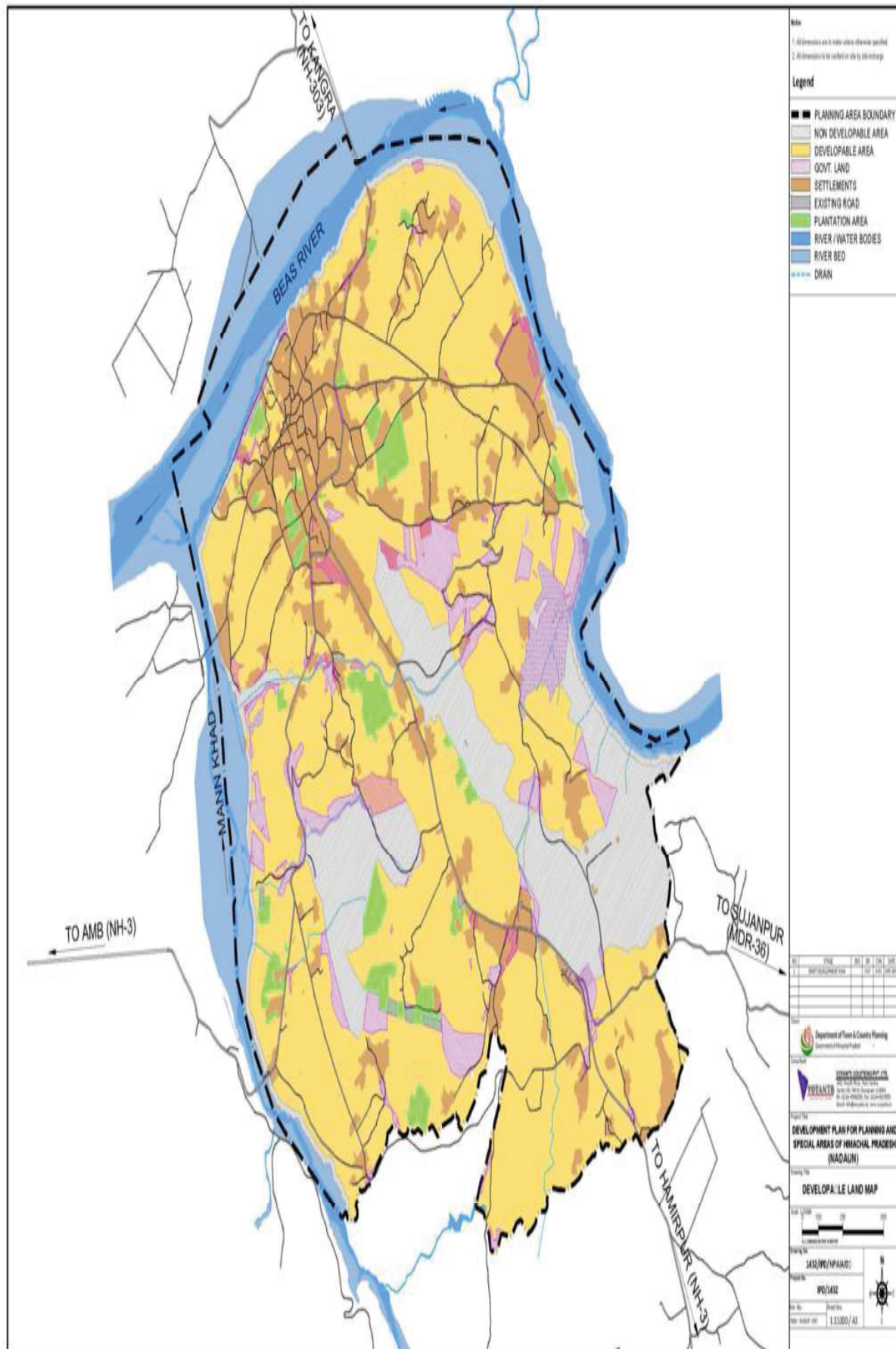


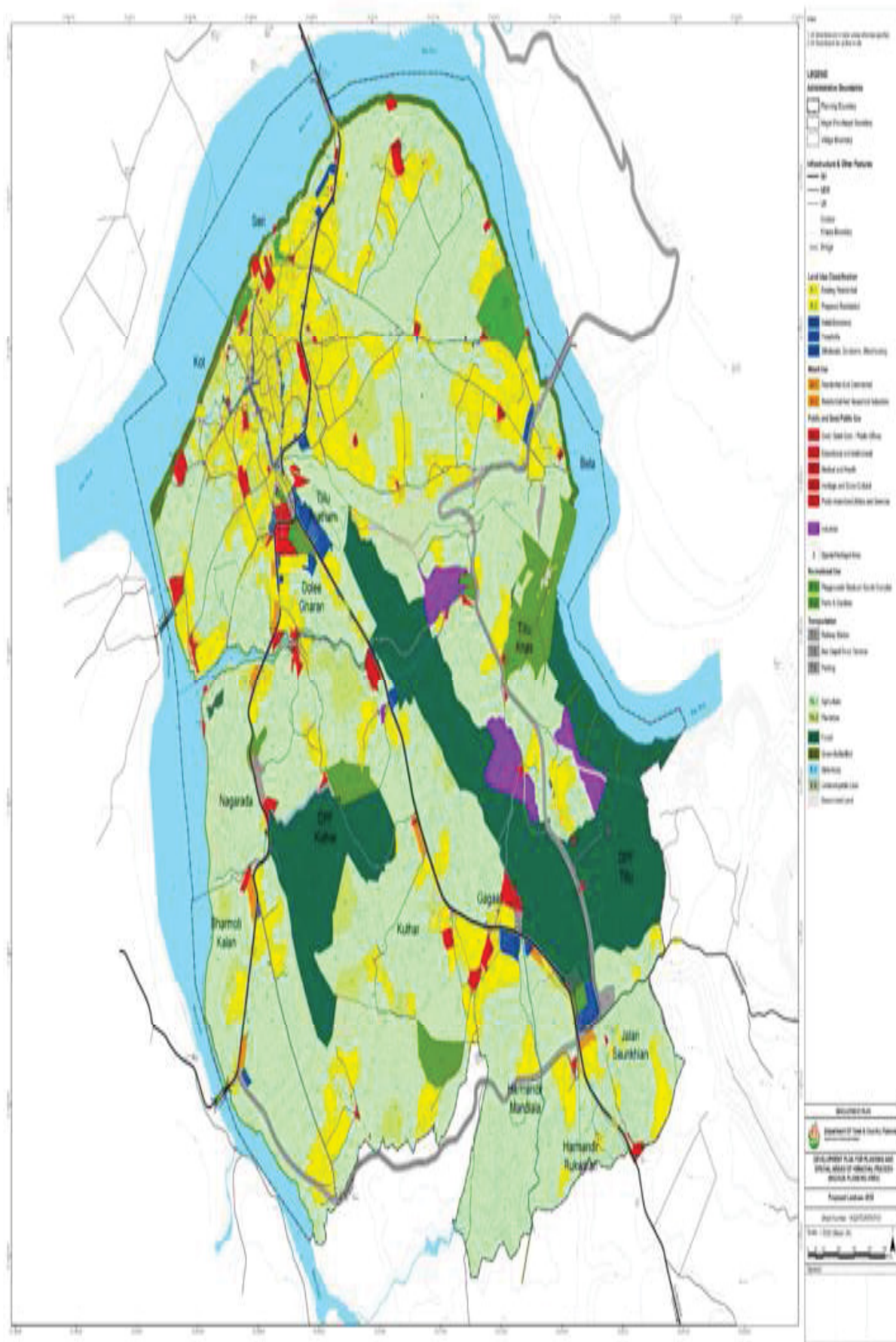












पर्यावरण, विज्ञान एवं प्रौद्योगिकी विभाग

अधिसूचना

शिमला-2, 1 नवम्बर, 2017

संख्या: एसटीई-बी(3)-1/2016.—हिमाचल प्रदेश के राज्यपाल, भारत के संविधान के अनुच्छेद 309 के परन्तुक द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, हिमाचल प्रदेश लोक सेवा आयोग के परामर्श से, हिमाचल प्रदेश, पर्यावरण, विज्ञान एवं प्रौद्योगिकी विभाग में **विधि अधिकारी, वर्ग-II (राजपत्रित)** अलिपिक वर्गीय सेवाएं, के पद के लिए इस अधिसूचना से संलग्न उपाबन्ध-‘क’ के अनुसार भर्ती और प्रोन्नति नियम बनाते हैं, अर्थात्:-

1. **संक्षिप्त नाम और प्रारम्भ.**—(1) इन नियमों का संक्षिप्त नाम हिमाचल प्रदेश पर्यावरण, विज्ञान एवं प्रौद्योगिकी विभाग, **विधि अधिकारी, वर्ग-II (राजपत्रित)** अलिपिक वर्गीय सेवाएं, भर्ती और प्रोन्नति नियम, 2017 है।

(2) यह नियम राजपत्र, हिमाचल प्रदेश में प्रकाशित होने की तारीख से प्रवृत्त होंगे।

आदेश द्वारा,
हस्ताक्षरित /—
अति० मुख्य सचिव।

उपाबन्ध-‘क’

हिमाचल प्रदेश पर्यावरण, विज्ञान एवं प्रौद्योगिकी विभाग में विधि अधिकारी, वर्ग-II (राजपत्रित) के पद के लिए भर्ती और प्रोन्नति नियम

1. **पद का नाम.**—विधि अधिकारी।
2. **पदों की संख्या.** 01 (एक)।
3. **वर्गीकरण.**—वर्ग-II (राजपत्रित)।
4. **वेतनमान.**—(I) नियमित पदधारी के लिए वेतनमान, पे बैंड: ₹10300—34800 /— जमा ₹ 4,400 /— ग्रेड पे।
(II) संविदा पर नियुक्त कर्मचारी के लिए उपलब्धियां: स्तम्भ संख्या 15—क में दिए गए ब्यौरे के अनुसार ₹14700 /— प्रतिमास ।
5. **‘चयन’ पद अथवा ‘अचयन’ पद.**—लागू नहीं।
6. **सीधी भर्ती के लिये आयु.**— 18 से 45 वर्ष

परन्तु सीधे भर्ती किए जाने वाले व्यक्तियों के लिए ऊपरी आयु सीमा, तदर्थ या संविदा के आधार पर नियुक्त किए गए व्यक्तियों सहित, पहले से ही सरकार की सेवा में रत अभ्यर्थियों को लागू नहीं होगी:

परन्तु यह और कि यदि तदर्थ या संविदा के आधार पर नियुक्त किया गया अभ्यर्थी, इस रूप में नियुक्ति की तारीख को अधिक आयु का हो गया हो, तो वह तदर्थ या संविदा के आधार पर नियुक्ति के कारण विहित आयु में शिथिलीकरण का पात्र नहीं होगा :

परन्तु यह और कि अनुसूचित जातियों/अनुसूचित जनजातियों/अन्य पिछड़े वर्गों तथा अन्य वर्गों के व्यक्तियों के लिए ऊपरी आयु सीमा में उतनी ही छूट दी जाएगी, जितनी हिमाचल प्रदेश सरकार के साधारण या विशेष आदेश (आदेशों) के अधीन अनुज्ञेय है:

परन्तु यह और भी कि समस्त पब्लिक सेक्टर निगमों तथा स्वायत्त निकायों के कर्मचारियों को जो ऐसे पब्लिक सेक्टर, निगमों तथा स्वायत्त निकायों के प्रारम्भिक गठन के समय, पब्लिक सेक्टर निगमों/स्वायत्त निकायों में आमेदन से पूर्व सरकारी कर्मचारी थे, सीधे भर्ती के लिए आयु की ऐसी सीमा में ही रियायत दी जाएगी, जैसी सरकारी कर्मचारियों को अनुज्ञेय है। ऐसी रियायत पब्लिक सेक्टर निगमों/स्वायत्त निकायों के ऐसे कर्मचारिवृन्द को अनुज्ञेय नहीं होगी जो तत्पश्चात् ऐसे निगमों/स्वायत्त निकायों द्वारा नियुक्त किए गए थे/किए गए हैं और उन पब्लिक सेक्टर निगमों/स्वायत्त निकायों के प्रारम्भिक गठन के पश्चात् ऐसे निगमों/स्वायत्त निकायों की सेवा में अन्तिम रूप से आमेलित किए गए हैं/किए गए थे।

टिप्पणः—सीधे भर्ती के लिए आयु सीमा की गणना उस वर्ष के प्रथम दिवस से की जाएगी जिसमें पद (पदों) को आवेदन आमन्त्रित करने के लिए, यथास्थिति, विज्ञापित किया गया है या नियोजनालयों को अधिसूचित किया गया है।

7. सीधे भर्ती किए जाने वाले व्यक्ति (व्यक्तियों) के लिए अपेक्षित न्यूनतम शैक्षिक और अन्य अर्हताएं—(क) अनिवार्य अर्हता.—1. किसी मान्यता प्राप्त विश्वविद्यालय से विधि में स्तानक की उपाधि।

2. किसी भी सरकारी/अर्ध सरकारी संस्थान/अभिकरण/गैर सरकारी संगठनों/प्राइवेट सैक्टर आदि में कार्य करते समय विधिक मामलों में कम से कम पांच वर्ष का अनुभव।

(ख) वांछनीय अर्हता.—1. पर्यावरण विधि तथा मुकद्दमेबाजी (लिटिगेशन) में अनुभव रखने वाले अभ्यर्थियों को अधिमान दिया जाएगा।

2. हिमाचल प्रदेश की रूढ़ियों, रीतियों और बोलियों का ज्ञान और प्रदेश में विद्यमान विशिष्ट दशाओं में नियुक्ति के लिए उपयुक्तता।

8. सीधे भर्ती किए जाने वाले व्यक्ति (व्यक्तियों) के लिए विहित आयु और शैक्षिक अर्हताएं प्रोन्नति व्यक्ति (व्यक्तियों) की दशा में लागू होंगी या नहीं.—आयु: लागू नहीं।

शैक्षिक अर्हता: लागू नहीं।

9. परिवीक्षा की अवधि, यदि कोई हो.—(क) दो वर्ष, जिसका एक वर्ष से अधिक ऐसी और अवधि के लिए विस्तार किया जा सकेगा जैसा कि सक्षम प्राधिकारी विशेष परिस्थितियों में और कारणों को लिखित में अभिलिखित करके आदेश दें।

(ख) संविदा के आधार पर, सेवाधृति के आधार पर नियुक्ति पर, अधिवर्षिता के पश्चात् पुनर्नियोजन पर और आमेदन पर कोई परिवीक्षा नहीं होगी।

10. भर्ती की पद्धति.—भर्ती सीधी होगी या प्रोन्नति या सैकण्डमेंट या स्थानान्तरण द्वारा और विभिन्न पद्धतियों द्वारा भरे जाने वाले पद (पदों) की प्रतिशतता.—शतप्रतिशत सीधी भर्ती द्वारा, नियमित आधार पर या संविदा के आधार पर भर्ती द्वारा।

11. प्रोन्नति/सैकेण्डमैंट/स्थानान्तरण द्वारा भर्ती की दशा में, श्रेणियां (ग्रेड) जिनसे प्रोन्नति/सैकेण्डमैंट/स्थानान्तरण किया जाएगा.—लागू नहीं।

12. यदि विभागीय प्रोन्नति समिति विद्यमान हो, तो उसकी संरचना.—(क) विभागीय प्रोन्नति समिति:— लागू नहीं।

(ख) विभागीय स्थायीकरण समिति:— जैसी सरकार द्वारा समय-समय पर गठित की जाए।

13. भर्ती करने में किन परिस्थितियों में हिमाचल प्रदेश लोक सेवा आयोग से परामर्श किया जाएगा.—जैसा कि विधि द्वारा अपेक्षित हो।

14. सीधी भर्ती के लिए अनिवार्य अपेक्षा.—किसी सेवा या पद पर नियुक्ति के लिए अभ्यार्थी का भारत का नागरिक होना अनिवार्य है।

15. सीधी भर्ती द्वारा पद पर नियुक्ति के लिए चयन.—सीधी भर्ती के मामलों में पद पर नियुक्ति के लिए चयन, साक्षात्कार/व्यक्तित्व परीक्षण के आधार पर किया जाएगा या यदि यथास्थिति, हिमाचल प्रदेश लोक सेवा आयोग या अन्य भर्ती अभिकरण/प्राधिकरण ऐसा करना आवश्यक या समीचीन समझे, तो पूर्व में ली गई छंटनी परीक्षा (वस्तुनिष्ठ प्रकार की)/लिखित परीक्षा या व्यावहारिक परीक्षाया शारीरिक परीक्षण के अनुसार साक्षात्कार/व्यक्तित्व परीक्षण के आधार पर किया जाएगा, जिसका स्तर/पाठ्यक्रम यदि, यथास्थिति, आयोग/अन्य भर्ती अभिकरण/प्राधिकरण द्वारा अवधारित किया जाएगा।

15-क संविदा नियुक्ति द्वारा पद पर नियुक्ति के लिए चयन.—इन नियमों में किसी बात के होते हुए भी पद पर संविदा नियुक्तियों नीचे दिए गए निबन्धनों और शर्तों के अध्वधीन की जाएंगी:

(I) संकल्पना.—(क) इस पॉलिसी के अधीन हिमाचल प्रदेश पर्यावरण, विज्ञान एवं प्रौद्योगिकी विभाग में विधि अधिकारी को संविदा के आधार पर प्रारम्भ में एक वर्ष के लिए लगाया जाएगा, जिसे वर्षानुवर्ष आधार पर आगे बढ़ाया जा सकेगा:

परन्तु संविदा अवधि में वर्षानुवर्ष आधार पर विस्तारण/नवीकरण के लिए सम्बद्ध विभागाध्यक्ष यह प्रमाण पत्र जारी करेगा कि संविदा पर नियुक्त व्यक्ति की सेवा और आचरण वर्ष के दौरान संतोषजनक रहा है और केवल तभी उसकी संविदा की अवधि नवीकृत/विस्तारित की जाएगी।

(ख) पद का हिमाचल प्रदेश लोक सेवा आयोग के कार्यक्षेत्र में आना.—प्रधान सचिव/ सचिव (पर्यावरण, विज्ञान एवं प्रौद्योगिकी), हिमाचल प्रदेश रिक्त पदों को संविदा के आधार पर भरने के लिए सरकार का अनुमोदन प्राप्त करने के पश्चात् अध्यपेक्षा को सम्बद्ध भर्ती अभिकरण, अर्थात् हिमाचल प्रदेश लोक सेवा आयोग के समक्ष रखेगा।

(ग) चयन, इन नियमों में विहित पात्रता शर्तों के अनुसार किया जाएगा।

(II) संविदात्मक उपलब्धियां.—संविदा के आधार पर नियुक्त विधि अधिकारी को ₹14,700/- की समेकित नियत संविदात्मक रकम (जो पद के पे बैंड का न्यूनतम जमा ग्रेड पे के बराबर होगी) प्रतिमास संदत्त की जाएगी। यदि संविदा में एक वर्ष से अधिक की बढ़ौतरी की जाती है, तो पश्चात्वर्ती वर्ष/वर्षों के लिए संविदात्मक उपलब्धियों में ₹ 441/- की रकम (पद के पे बैंड का न्यूनतम जमा ग्रेड पे का 3 प्रतिशत) वार्षिक वृद्धि के रूप में अनुज्ञात की जाएगी।

(III) नियुक्ति/अनुशासनिक प्राधिकारी.—सचिव (पर्यावरण, विज्ञान एवं प्रौद्योगिकी), हिमाचल प्रदेश सरकार नियुक्ति और अनुशासन प्राधिकारी होगा।

(IV) चयन प्रक्रिया.—संविदा नियुक्ति की दशा में पद पर नियुक्ति के लिए चयन, साक्षात्कार/व्यक्तित्व परीक्षण के आधार पर किया जाएगा या यदि ऐसा करना आवश्यक या समीचीन समझा जाए, तो पूर्व में ली गई छंटनी परीक्षा (वस्तुनिष्ठ, प्रकार की)/लिखित परीक्षा या व्यावहारिक परीक्षा या शारीरिक परीक्षण के अनुसार साक्षात्कार/व्यक्तित्व के आधार पर किया जाएगा, जिसका स्तर/पाठ्यक्रम आदि सम्बद्ध भर्ती अभिकरण अर्थात् हिमाचल प्रदेश लोक सेवा आयोग द्वारा अवधारित किया जाएगा।

(V) संविदात्मक नियुक्ति के लिए चयन समिति.—जैसी सम्बद्ध भर्ती अभिकरण अर्थात् हिमाचल प्रदेश लोक सेवा आयोग द्वारा समय-समय पर गठित की जाए।

(VI) करार.—अभ्यर्थी को, चयन के पश्चात् इन नियमों से संलग्न उपाबन्ध—“ख” के अनुसार करार हस्ताक्षरित करना होगा।

(VII) निबन्धन एवं शर्तें.—(क) संविदा के आधार पर नियुक्त व्यक्ति को ₹14,700/- की समेकित नियत संविदात्मक रकम (जो पे बैंड का न्यूनतम जमा ग्रेड पे के बराबर होगी) प्रतिमास संदत्त की जाएगी।

संविदा पर नियुक्त व्यक्ति आगे बढ़ाए गए वर्ष/वर्षों के लिए संविदात्मक रकम में ₹441/- (पद पे बैंड का न्यूनतम जमा ग्रेड पे का तीन प्रतिशत) की वृद्धि का हकदार होगा और अन्य कोई सहबद्ध प्रसुविधाएं, जैसे वरिष्ठ/चयन वेतनमान इत्यादि नहीं दिया जाएगा।

(ख) संविदा पर नियुक्त व्यक्ति की सेवा पूर्णतया अस्थायी आधार पर होगी। यदि संविदा पर नियुक्त व्यक्ति का कार्यपालन/आचरण ठीक नहीं पाया जाता है, तो नियुक्ति पर्यवसित (समाप्त) किए जाने के लिए दायी होगी।

(ग) संविदा पर नियुक्त व्यक्ति एक मास की सेवा पूरी करने के पश्चात् एक दिन के आकस्मिक अवकाश का हकदार होगा। तथापि संविदा पर नियुक्त कर्मचारी 135 दिन के प्रसूति अवकाश, 10 दिन के चिकित्सा अवकाश और 5 दिन के विशेष अवकाश के लिए भी हकदार होगा/होगी।

संविदा पर नियुक्त महिला कर्मचारी पूरी सेवा के दौरान गर्भपात हो जाने सहित गर्भपात कराने की दशा में, प्राधिकृत सरकारी चिकित्सा अधिकारी द्वारा जारी चिकित्सा प्रमाण पत्र प्रस्तुत करने पर पैतालिस दिन से अधिक प्रसूति अवकाश (जीवित बच्चों की संख्या का विचार किए बिना) के लिए भी हकदार होगी।

वह चिकित्सा प्रतिपूर्ति और एल0टी0सी0 आदि के लिए भी हकदार नहीं होगा/होगी। संविदा पर नियुक्त व्यक्ति को उपरोक्त के सिवाय अन्य किसी प्रकार का कोई अवकाश अनुज्ञात नहीं होगा :

परन्तु अनुपयुक्त आकस्मिक अवकाश व चिकित्सा अवकाश एक कैलेंडर वर्ष तक संचित किया जा सकेगा और आगामी कैलेंडर वर्ष के लिए अग्रणीत नहीं किया जाएगा।

(घ) नियन्त्रक अधिकारी के अनुमोदन के बिना कर्तव्य (ड्यूटी) से अनधिकृत अनुपस्थिति से स्वतः ही संविदा का पर्यावसान (समापन) हो जायेगा, तथापि आपवादिक मामलों में जहां पर चिकित्सा आधार पर कर्तव्य से अनधिकृत अनुपस्थिति के हालात संविदा पर नियुक्त व्यक्ति के नियन्त्रण से बाहर हो तो उसके नियमितीकरण के मामले में विचार करते समय ऐसी अवधि अपवर्जित नहीं की जाएगी, परन्तु पदधारी को इस बावत समय पर नियन्त्रण अधिकारी को सूचित करना होगा। तथापि, संविदा पर नियुक्त व्यक्ति कर्तव्य से अनुपस्थिति की ऐसी अवधि के लिए संविदात्मक रकम का हकदार नहीं होगा:

परन्तु उसे सरकार के प्रचलित अनुदेशों के अनुसार चिकित्सा अधिकारी द्वारा जारी बीमारी/आरोग्य का प्रमाण-पत्र प्रस्तुत करना होगा।

(ड) संविदा पर नियुक्त पदधारी जिसने तैनाती के एक स्थान पर तीन वर्ष का सेवाकाल पूर्ण कर लिया है, आवश्यकता के आधार पर स्थानान्तरण के लिए पात्र होगा, जहां भी प्रशासनिक आधार पर ऐसा करना अपेक्षित हो।

(च) चयनित अभ्यर्थी को सरकारी/रजिस्ट्रीकृत चिकित्सा व्यवसायी से अपना आरोग्य प्रमाण-पत्र प्रस्तुत करना होगा। बारह सप्ताह से अधिक गर्भवती महिला अभ्यर्थी प्रसव होने तक अस्थायी तौर पर अनुपयुक्त बनी रहेगी। महिला अभ्यर्थी का किसी प्राधिकृत चिकित्सा अधिकारी/व्यवसायी द्वारा उपयुक्तता के लिए पुनः परीक्षण किया जाएगा।

(छ) संविदा पर नियुक्त व्यक्ति का, यदि अपने पदीय कर्तव्यों के सम्बन्ध में दौरे पर जाना अपेक्षित हो, तो वह उसी दर पर, जैसी नियमित प्रतिस्थानी कर्मचारियों को वेतनमान के न्यूनतम पर लागू है, यात्रा भत्ते/दैनिक भत्ते का हकदार होगा/होगी।

(ज) नियमित कर्मचारियों की दशा में, यथा लागू सेवा नियमों के उपबन्ध जैसे एफ0आर0-एस0आर0, छुट्टी नियम, साधारण भविष्य निधि नियम, पेंशन नियम तथा आचरण नियम आदि संविदा पर नियुक्त व्यक्तियों की दशा में लागू नहीं होंगे। वे इस स्तम्भ में यथावर्णित उपलब्धियों आदि के लिए हकदार होंगे।

16. आरक्षण.—सेवा में नियुक्ति, हिमाचल प्रदेश सरकार द्वारा समय-समय पर अनुसूचित जातियों/अनुसूचित जनजातियों/अन्य पिछड़े वर्गों और अन्य प्रवर्गों के व्यक्तियों के लिए सेवा में आरक्षण की बाबत जारी किए गए अनुदेशों के अधीन होगी।

17. विभागीय परीक्षा.—सेवा में प्रत्येक सदस्य को समय-समय पर यथा संशोधित हिमाचल प्रदेश विभागीय परीक्षा नियम, 1997 में यथा विहित विभागीय परीक्षा पास करनी होगी।

18. शिथिल करने की शक्ति.—जहां राज्य सरकार की यह राय हो कि ऐसा करना आवश्यक या समीचीन है, वहां वह कारणों को लिखित में अभिलिखित करके और हिमाचल प्रदेश लोक सेवा आयोग के परामर्श से, आदेश द्वारा, इन नियमों के किन्हीं उपबन्धों को किसी वर्ग या व्यक्तियों के प्रवर्ग या पदों की बावत शिथिल कर सकेगी।

उपाबन्ध—“ख”

विधि अधिकारी और हिमाचल प्रदेश सरकार के मध्य सचिव (पर्यावरण, विज्ञान एवं प्रौद्योगिकी, हिमाचल प्रदेश सरकार के माध्यम से निष्पादित की जाने वाली संविदा/करार का प्रारूप

यह करार श्री/श्रीमती.....पुत्र/पुत्री श्री.....
निवासी..... संविदा पर नियुक्त व्यक्ति (जिसे इसमें इसके पश्चात् ‘प्रथम पक्षकार’ कहा गया है), और हिमाचल प्रदेश के राज्यपाल के मध्य, सचिव (पर्यावरण, विज्ञान एवं प्रौद्योगिकी), हिमाचल प्रदेश सरकार (जिसे इसमें इसके पश्चात् ‘द्वितीय पक्षकार’ कहा गया है) के माध्यम से आज तारीख.....को किया गया।

‘द्वितीय पक्षकार’ ने उपरोक्त ‘प्रथम पक्षकार’ को लगाया है और ‘प्रथम पक्षकार’ ने विधि अधिकारी के रूप में संविदा के आधार पर निम्नलिखित निबन्धन और शर्तों पर सेवा करने के लिए सहमति दी है:—

1. यह कि प्रथम पक्षकार विधि अधिकारी के रूप में.....से प्रारम्भ होने औरको समाप्त होने वाले दिन तक, एक वर्ष की अवधि के लिए द्वितीय पक्षकार की सेवा में रहेगा। यह विनिर्दिष्ट रूप से उल्लिखित किया गया है और दोनों पक्षकारों द्वारा करार पाया

गया है कि प्रथम पक्षकार की द्वितीय पक्षकार के साथ संविदा आखिरी कार्य दिवस को अर्थात्
.....तारीख को स्वयंमेव ही पर्यवसित (समाप्त) समझी जाएगी और सूचना नोटिस आवश्यक नहीं होगा:

परन्तु वर्षानुवर्ष आधार पर संविदा की अवधि में बढ़ौतरी/नवीकरण के लिए सम्बद्ध विभागाध्यक्ष यह प्रमाण-पत्र जारी करेगा कि संविदा पर नियुक्त व्यक्ति की सेवा और आचरण वर्ष के दौरान सन्तोषजनक रहा है और केवल तभी उसकी संविदा की अवधि नवीकृत/विस्तारित की जाएगी।

2. प्रथम पक्षकार की संविदात्मक रकम ₹ 14,700/- प्रतिमास होगी।
3. प्रथम पक्षकार की सेवा पूर्णतया अस्थाई आधार पर होगी। यदि संविदा पर नियुक्त व्यक्ति का कार्य/आचरण ठीक नहीं पाया जाता है या यदि नियमित पदधारी उस रिक्ति के विरुद्ध नियुक्त/तैनात कर दिया जाता है, जिसके लिए प्रथम पक्षकार को संविदा पर लगाया गया है तो नियुक्ति पर्यावसित (समाप्त) किए जाने के लिए दायी होगी।
4. संविदा पर नियुक्त विधि अधिकारी एक मास की सेवा पूरी करने के पश्चात् एक दिन के आकस्मिक अवकाश का हकदार होगा। तथापि, संविदा पर नियुक्त कर्मचारी 135 दिन के प्रसूति अवकाश, 10 दिन के चिकित्सा अवकाश और 5 दिन के विशेष अवकाश के लिए भी हकदार होगा/होगी। संविदा पर नियुक्त महिला कर्मचारी पूरी सेवा के दौरान गर्भपात हो जाने सहित गर्भपात कराने की दशा में, प्राधिकृत सरकारी चिकित्सा अधिकारी द्वारा जारी चिकित्सा प्रमाण पत्र प्रस्तुत करने पर पैतालिस दिन से अधिक प्रसूति अवकाशी (जीवित बच्चों की संख्या का विचार किए बिना) के लिए भी हकदार होगी। वह चिकित्सा प्रतिपूर्ति और एल0टी0सी0 इत्यादि के लिए भी हकदार नहीं होगा/होगी। संविदात्मक विधि अधिकारी को उपरोक्त के सिवाए किसी भी प्रकार का अन्य कोई अवकाश अनुज्ञात नहीं होगा:

परन्तु अनुपयुक्त आकस्मिक अवकाश, चिकित्सा अवकाश और विशेष अवकाश एक कैलेण्डर वर्ष तक संचित किया जा सकेगा और आगामी कैलेण्डर वर्ष के लिए अग्रणीत नहीं किया जाएगा।

5. नियन्त्रक अधिकारी के अनुमोदन के बिना कर्तव्य से अनधिकृत अनुपस्थिति से स्वतः ही संविदा का पर्यावसान (समापन) हो जाएगा। तथापि अपवादिक मामलों में, जहां पर चिकित्सा आधार पर संविदा पर नियुक्त व्यक्ति के नियन्त्रण से बाहर हो तो ऐसी अवधि उसके नियमितिकरण के मामले में विचार करते समय अपवर्जित नहीं की जाएगी, परन्तु पदधारी को इस बाबत समय पर नियन्त्रण प्राधिकारी को सूचित करना होगा। तथापि संविदा पर नियुक्त व्यक्ति कर्तव्य से अनुपस्थिति की अवधि के लिए संविदात्मक रकम का हकदार नहीं होगा।

परन्तु उसे सरकार से प्रचलित अनुदेशों के अनुसार चिकित्सा अधिकारी द्वारा जारी बीमारी/आरोग्य का प्रमाणपत्र प्रस्तुत करना होगा।

6. संविदा पर नियुक्त पदधारी जिसने तैनाती के एक स्थान पर तीन वर्ष का सेवाकाल पूर्ण कर लिया है, आवश्यकता के आधार पर जहां भी प्रशासनिक आधार पर ऐसा करना अपेक्षित हो, स्थानान्तरण हेतु पात्र होगा।
7. चयनित अभ्यर्थी को सरकारी/रजिस्ट्रीकृत चिकित्सा व्यवसायी से अपना आरोग्य प्रमाण-पत्र प्रस्तुत करना होगा। महिला अभ्यर्थियों की दशा में बारह सप्ताह से अधिक की गर्भावस्था प्रसव होने तक उसे अस्थायी तौर पर अनुपयुक्त बना देगी। ऐसी महिला अभ्यर्थी का किसी प्राधिकृत चिकित्सा अधिकारी/व्यवसायी द्वारा उपयुक्तता के लिए पुनः परीक्षण किया जाना चाहिए।
8. संविदा पर नियुक्त व्यक्ति का, यदि अपने पदीय कर्तव्यों के सम्बन्ध में दौरे पर जाना अपेक्षित हो, तो वह उसी दर पर, जैसी नियमित प्रतिस्थानी कर्मचारी को वेतनमान के न्यूनतम पर लागू है, यात्रा भत्ते/दैनिक भत्ते का हकदार होगा/होगी।

9. संविदात्मक कर्मचारी (कर्मचारियों) की कर्मचारी सामूहिक जीवन बीमा योजना के साथ-साथ ई0पी0एफ0/जी0पी0एफ. भी लागू नहीं होगा।

इसके साक्ष्यस्वरूप प्रथम पक्षकार और द्वितीय पक्षकार ने साक्षियों की उपस्थिति में इसमें सर्वप्रथम उल्लिखित तारीख को अपने-अपने हस्ताक्षर कर दिए हैं।

साक्षियों की उपस्थिति में :

1.

 (नाम व पूरा पता)

(प्रथम पक्षकार के हस्ताक्षर)

2.

 (नाम व पूरा पता)

साक्षियों की उपस्थिति में:

1.

 (नाम व पूरा पता)

2.

 (नाम व पूरा पता)

(द्वितीय पक्षकार के हस्ताक्षर)

[*Autoritative English Test of this Department Notification No. STE-B(3)-1/2016 dated..... as required under clause (3) of Article 348 of the Constitution of India*].

ENVIRONMENT, SCENCE & TECHNOLOGY DEPARTMENT

NOTIFICATION

Shimla-171 002, the 1st November, 2017

No.STE-B(3)-1/2016.—In exercise of the powers conferred by proviso of article, 309 of the Constitution of India, the Governor, Himachal Pradesh in consultation with the Himachal Pradesh Public Service Commission, is pleased to make the Recruitment & Promotion Rules for the post of **Law Officer, Class-II** (Gazetted) in the Department of Environment, Science & Technology, Himachal Pradesh as per annexure-'A' attached to this notification, namely.—

1. Short title and commencement.—(1) These rules may be called the Himachal Pradesh, Department of Environment, Science & Technology, Law Officer, Class-II (Gazetted) recruitment and Promotion Rules, 2017.

(2) These rules shall come into force from the date of publication in the Rajpatra, Himachal Pradesh.

By order,
Sd/-

Addl. Chief Secretary (Env., Sci. & Tech.).

ANNEXURE-A

RECRUITMENT AND PROMOTION RULES FOR THE POST OF LAW OFFICER, CLASS-II (GAZETTED) IN THE DEPARTMENT OF ENVIRONMENT, SCIENCE & TECHNOLOGY, HIMACHAL PRADESH

- 1. Name of the Post.**—Law Officer
- 2. Number of Posts.**—01 (One)
- 3. Classification.**—Class-II (Gazetted)
- 4. Scale of Pay.**—(i) *Pay Band for regular incumbents*:— ₹ 10300-34800+ ₹ 4400 Grade Pay.
(ii) *Emoluments for contract employee*:— ₹14,700/- as per details given in col.15-A.
- 5. Whether 'Selection' Post or 'Non-Selection' post'.**— Not Applicable
- 6. Age for direct recruitment.**—Between 18 to 45 years.

Provided that the upper age limit for direct recruits will not be applicable to the candidates already in service of the Government including those who have been appointed on adhoc or on contract basis:

Provided further that if a candidate appointed on adhoc basis or on contract basis had become over-age on the date he/she was appointed as such he/she shall not be eligible for any relaxation in the prescribed age-limit by virtue of his/her such adhoc or contract appointment:

Provided further that upper age-limit is relaxable for Scheduled Caste/Scheduled Tribes/Other categories of persons to the extent permissible under the general or special order (s) of the Himachal Pradesh Government:

Provided further that the employees of all the Public Sector Corporations and Autonomous Bodies who happened to be Government servants before absorption in Public Sector Corporations/Autonomous Bodies at the time of initial constitutions of such Corporations/Autonomous Bodies shall be allowed age concession in direct recruitment as admissible to Government servants. This concession will not, however, be admissible to such staff of the Public Sector Corporations/Corporations/Autonomous Bodies who were/are

subsequently appointed by such Corporations/ Autonomous Bodies and who are/were finally absorbed in the service of such Corporations/Autonomous Bodies after initial constitution of the Public Sector Corporations/Autonomous Bodies.

Note:—Age limit for direct recruitment will be reckoned on the first day of the year in which the post(s) is/are advertised for inviting applications or notified to the Employment Exchanges, as the case may be.

7. Minimum educational and other qualifications required for direct recruit(s).—(a) *Essential Qualification:*—(i) Bachelor's Degree in Law from a recognized University.

(ii) Minimum 5 years experience in legal matters while working in a Government/ Semi Government Institution/ Agencies/NGOs/Private Sector etc.

(b) *Desirable Qualification:*—(i) Preference will be given to the candidates having experience in Environmental Law and Litigation.

(ii) Knowledge of customs, manners & dialects of Himachal Pradesh and suitability for appointment in the peculiar conditions prevailing in the Pradesh.

8. Whether age and educational qualifications prescribed for direct recruits will apply in the case of the promote(s) ?.—*Age:*— Not Applicable.

Educational Qualification:— Not Applicable.

9. Period of probation, if any.—(a) Two years subject to such further extension for a period not exceeding one year as may be ordered by the competent authority in special circumstances and reasons to be recorded in writing.

(b) No probation in case of appointment on contract basis, tenure basis, re-employment after superannuation and absorption.

10. Method of recruitment—whether by direct recruitment or by promotion/secondment/transfer and the percentage of post to be filled in by various methods.—100% by direct recruitment on regular basis or by recruitment on contract basis as the case may be.

11. In case of recruitment by promotion/secondment/ transfer, grade(s) from which promotion/secondment, transfer is to be made.—Not Applicable.

12. If a Departmental Promotion Committee exists, what is its composition?.—(a) *Departmental Promotion Committee:*—Not applicable

(b) *Departmental Confirmation Committee:*—As may be constituted by the Government from time to time.

13. Circumstances under which the Himachal Pradesh Public Service Commission (HPPSC) is to be consulted in making recruitment.—As required under the law.

14. Essential requirement for a direct recruitment.—A candidate for appointment to any service or post must be a citizen of India.

15. Selection for appointment to the post by direct recruitment.—Selection for appointment to the post in the case of direct recruitment shall be made on the basis of interview/personality test, if the Himachal Pradesh Public Service Commission or other recruiting agency/authority, as the case may be, so consider necessary or expedient on the basis of interview/personality test preceded by a screening test (objectives type)/written test, practical test or physical test, the standard/syllabus, etc. of which, will be determined by the Commission/other recruiting agency/authority as the case may be.

15.A Selection for appointment to the post by Contract appointment.—Notwithstanding anything contained in these rules, contract appointment to the post will be made subject to the terms and conditions given below:

(I) CONCEPT:—(a) Under this policy, the Law Officer in the Department of Environment, Science & Technology, H.P. will be engaged on contract basis initially for one year which may be extendable on year to year basis:

Provided that for extension/renewal of contract period on year to year basis the concerned HOD shall issue a certificate that the service and conduct of the contract appointee is satisfactory during the year and only then his period of contract is to be renewed/extended.

(b) POST FALLS WITHIN THE PURVIEW OF HP PSC:—The Pr. Secretary/Secretary (Environment, Science & Technology) to the Govt. of H.P. after obtaining the approval of the Government to fill up the vacant posts on contract basis will place the requisition with the concerned recruiting agency i.e. Himachal Pradesh Public Service Commission.

(c) The selection will be made in accordance with the eligibility conditions prescribed in these rules.

(II) CONTRACTUAL EMOLUMENTS:—The Law Officer appointed on contract basis will be paid consolidated fixed contractual amount @ ₹ 14,700/- P.M. (which shall be equal to minimum of Pay band plus grade pay). An amount of ₹ 441/- (3% of the minimum of Pay band + Grade Pay of the post) as annual increase in contractual emoluments for the subsequent year(s) will be allowed if contract is extended beyond one year.

(III) APPOINTING/DISCIPLINARY AUTHORITY:—The Pr. Secretary/Secretary (Environment, Science & Technology) to the Govt. of H.P. will be appointing and disciplinary authority.

(IV) SELECTION PROCESS:—Selection for appointment to the post in the case of Contract Appointment will be made on the basis of interview/personality test or if considered necessary or expedient on the basis of interview/personality test preceded by a screening test (objective test)/written test or practical test or physical test, the standard syllabus etc. of which will be determined by the concerned recruitment agency i.e. Himachal Pradesh Public Service Commission.

(V) COMMITTEE FOR SELECTION OF CONTRACTUAL APPOINTMENTS:—As may be constituted by the concerned recruiting agency i.e. the Himachal Pradesh Public Service Commission from time to time.

(VI) AGREEMENT:—After selection of a candidate he/she shall sign an agreement as per “Annexure-B” appended to these rules.

(VIII) TERMS AND CONDITIONS:—(a) The Contractual appointee will be paid fixed contractual amount @ ₹ 14,700/- per month (which shall be equal to minimum of Pay band plus Grade pay). The Contract Appointee will be entitled for increase in contractual amount @ ₹ 441/- (3% of the minimum of Pay band + grade Pay of the post) for further extended years and no other allied benefits such as senior/selection scales etc. will be given.

(b) The service of the Contract Appointee will be purely on temporary basis. The appointment is liable to be terminated in case the performance/ conduct of the contract appointee is not found satisfactory.

(c) The contract appointee will be entitled for one day's casual leave after putting one month service. However, the contract employee will also be entitled for 135 days Maternity Leave, 10 days Medical Leave and 5 days special leave. A female contract appointee shall also be entitled for maternity leave not exceeding 45 days (irrespective of the number of surviving children) during the entire service, in case of miscarriage including abortion, on production of medical certificate issued by the authorized Government Medical Officer. He/she shall not be entitled for Medical re- imbursement and LTC etc. No leave of any other kind except above is admissible to the contract appointee:

Provided that the un-availed Casual Leave and Medical Leave and Special Leave can be accumulated up to the Calendar Year and will not be carried forward for the next Calendar Year.

(d) Unauthorized absence from the duty without the approval of the controlling officer shall automatically lead to the termination of the contract. However, in exceptional cases where the circumstances for un- authorized absence from duty were beyond his/her control on medical grounds, such period shall not be excluded while considering his/her case for regularization but the incumbent shall have to intimate the controlling authority in this regard well in time. However, the contract appointee shall not be entitled for contractual amount for this period of absence from duty.

Provided that he/she shall submit the certificate of illness/fitness issued by the Medical Officer, as per prevailing instructions of the Government.

(e) An official appointed on contract basis who has completed three years tenure at one place of posting will be eligible for transfer on need based basis wherever required on administrative grounds.

(f) Selected candidate will have to submit a certificate of his/her fitness from a Government/ Registered Medical Practitioner. Women candidate pregnant beyond 12 weeks will stand temporarily unfit till the confinement is over. The women candidate will be re-examined for the fitness from an authorized Medical Officer/Practitioner.

(g) Contract appointee will be entitled to TA/DA if required to go on tour in connection with his/her official duties at the same rate as applicable to regular counterpart officials at the minimum of pay scale;

(h) Provisions of service rules like FR SR, Leave Rules, GPF Rules, Pension Rules & Conduct Rules etc. as are applicable in case of regular employees will not be applicable in case of contract appointees. Employees Group Insurance Scheme as well as EPF/GPF will also not be applicable to contract appointee(s).

16. Reservation.—The appointment to the service shall be subject to orders regarding reservation in the service for Scheduled Castes/Scheduled Tribes/Other Backward Classes/Other categories of persons issued by the Himachal Pradesh Government from time to time.

17. Departmental Examination.—Every member of the Service shall pass a Departmental Examination as prescribed in the H.P. Departmental Examination Rule, 1997 as amended from time to time.

18. Powers to relax.—Where the State Government is of the opinion that it is necessary or expedient to do so, it may, by order for reasons to be recorded in writing and in consultation with the Himachal Pradesh Public Service Commission relax any of the provision(s) of these rules with respect to any class or category of person(s) or post(s).

ANNEXURE –B

FORM OF CONTRACT/AGREEMENT TO BE EXECUTED BETWEEN THE LAW OFFICER AND THE GOVERNMENT OF HIMACHAL PRADESH THROUGH THE PR. SECRETARY/SECRETARY (ENVIRONMENT, SCIENCE & TECHNOLOGY) TO THE GOVT. OF HIMACHAL PRADESH.

This agreement is made on this.....day of.....in the yearbetween Sh./Smt..... S/o/D/o R/o..... contract appointee, (hereinafter called the FIRST PARTY) AND the Governor of Himachal Pradesh through Pr. Secretary/Secretary (Environment, Science & Technology) to the Govt. of Himachal Pradesh (hereinafter “SECOND PARTY”).

Whereas, the SECOND PARTY has engaged the aforesaid FIRST PARTY and the FIRST PARTY has agreed to serve as a Law Officer on contract basis on the following terms and conditions:—

1. That the FIRST PARTY shall remain in the service of the SECOND PARTY as a Law Officer for a period of one year commencing on day ofand ending on the day ofIt is specifically mentioned and agreed upon by both the parties that the contract of the FIRST PARTY with SECOND PARTY shall ipso-facto stand terminated on the last working day i.e. onand information notice shall not be necessary:

Provided that for further extension/ renewal of contract period the HOD shall issue a certificate that the service and conduct of the contract appointee was satisfactory during the year and only then the period of contract is to be renewed/ extended.

2. That the contractual amount of the FIRST PARTY will be K14,700/- per month.
3. That the services of FIRST PARTY will be purely on temporary basis. The appointment is liable to be terminated in case the performance/ conduct of the contract appointee is not found satisfactory.
4. The Contractual appointee will be entitled for one day's casual leave after putting one month service. However, the contract employee will also be entitled for 135 days Maternity Leave, 10 days Medical Leave and 5 days special leave. A female contract appointee shall also be entitled for maternity leave not exceeding 45 days (irrespective of the number of surviving children) during the entire service, in case of miscarriage including abortion, on production of medical certificate issued by the

authorized Government Medical Officer. He/she shall not be entitled for Medical Reimbursement and LTC etc. No leave of any other kind except above is admissible to the contract appointee:

Provided that the un-availed Casual Leave and Medical Leave can be accumulated up to the Calendar Year and will not be carried forward for the next Calendar Year.

5. Unauthorized absence from the duty without the approval of the controlling officer shall automatically lead to the termination of the contract. However, in exceptional cases where the circumstances for un-authorized absence from duty were beyond his/her control on medical grounds, such period shall not be excluded while considering his/her case for regularization but the incumbent shall have to intimate the controlling authority in this regard well in time. However, the contract appointee shall not be entitled for contractual amount for this period of absence from duty:

Provided that he/she shall submit the certificate of illness/fitness issued by the Medical Officer, as per prevailing instructions of the Government:

6. An official appointed on contract basis who have completed three years tenure at one place of posting will be eligible for transfer on need based basis wherever required on administrative grounds.
7. That selected candidate will have to submit a certificate of his/her fitness from a Government/Registered Medical Practitioner. In case woman candidate pregnant beyond twelve (12) weeks will stand temporarily unfit till the confinement is over. The woman candidate shall be re-examined for the fitness from an authorized Medical Officer/Practitioner.
8. That contract appointee shall be entitled to TA/DA if required to go on tour in connection with his/her official duties at the same rate as applicable to regular counterpart officials at the minimum of pay scale.
9. That the Employees Group Insurance Scheme as well as EPF/GPF will not be applicable to contractual appointee(s).

IN WITNESS the FIRST PARTY AND SECOND PARTY have herein to set their hands the day, month and year first above written.

IN THE PRESENCE OF WITNESSES :

1.

.....

(Name and full address)

Signature of the FIRST PARTY

2.

.....

(Name and full address)

Signature of the SECOND PARTY

ENVIRONMENT, SCIENCE & TECHNOLOGY DEPARTMENT**NOTIFICATION***Dated: 07th November, 2017*

No. STE-E(3)-10/2017-Pt-I.—In pursuance of the notification of Wetlands (Conservation and Management) Rules, 2017 by Ministry of Environment, Forest & Climate Change, Government of India, dated 26-09-2017, the Governor, Himachal Pradesh is pleased to constitute **Himachal Pradesh State Wetlands Authority(HPSWA)** under the Conservation and Management of Wetlands as defined in Rule 5 sub rule (1) of the Wetlands (Conservation and Management) Rules, 2017 as under:

1. The State Government hereby constitutes the State Wetlands Authority with the following members, namely:—

- (i) Minister In-charge of the Department of Environment, Science and Technology – Chairperson;
- (ii) Chief Secretary to the Govt. of H.P – Vice Chairperson;
- (iii) Additional Chief Secretary, Environment, Science & Technology, Govt. of H.P – Member *ex-officio*;
- (iv) Secretary in-charge of the Department of Forest - Member *ex-officio*;
- (v) Secretary in-charge of the Department of Urban Development - Member *ex-officio*;
- (vi) Secretary in-charge of the Department of Rural Development - Member *ex-officio*;
- (vii) Secretary in-charge of the Department of Fisheries - Member *ex-officio*;
- (viii) Secretary in-charge of the Department of Irrigation and Public Health - Member *ex-officio*;
- (ix) Secretary in-charge of the Department of Tourism - Member *ex-officio*;
- (x) Secretary in-charge of the Department of Revenue - Member *ex-officio*;
- (xi) Incharge, State Remote Sensing Centre - Member *ex-officio*;
- (xii) Principal Chief Conservator Forests(HOFF)-Member *ex-officio*;
- (xiii) Chief Wildlife Warden - Member *ex-officio*;
- (xiv) Member Secretary, State Biodiversity Board - Member *ex-officio*;
- (xv) Member Secretary, State Pollution Control Board - Member *ex-officio*;
- (xvi) Additional Principal Chief Conservator of Forests of the Regional Office of Ministry of Environment, Forest and Climate Change - Member *ex-officio*;

(xvii) Five non-official members to be nominated in due course in field of Ecology, Landscape, Fisheries, Hydrology and socio- Economics

(xviii) Member Secretary/Joint Member Secretary, Himachal Pradesh Council for Science, Technology and Environment (HIMCOSTE) – Member Secretary;

2. The H.P.State Wetlands Authority shall exercise the powers and functions as defined in the notification No. GSR 1203(E) of the Ministry of Environment, Forests and Climate Change, Government of India, New Delhi.

3. The H.P. State Council for Science Technology and Environment (HIMCOSTE), shall provide all necessary support and act as nodal Department and Secretariat to the Authority.

4. As per Rule 5 Sub Rule (6) of Wetland (Conservation & Management) Rules 2017, the Authority shall, within ninety days of these rules, shall constitute:—

(a) a technical committee to review brief documents, management plans and advise on any technical matter referred by the Wetland Authority; and

(b) a grievance committee consisting of four members to provide a mechanism for hearing and forwarding the grievances raised by public to the Authority;

5. The Committees referred to in sub-rule (6) shall meet at least once in every quarter to perform their functions.

6. The Authority shall meet at least thrice in a year.

7. The term of non-official members of the Authority nominated by State Government, shall be for a period not exceeding three years.

The office of the Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE), Vigyan Bhawan, Bemloe, Shimla-1 would function as the Secretariat of the Himachal Pradesh State Wetlands Authority for Conservation and Management of the Wetlands of the State.

By order,
Sd/-
Chief Secretary.

